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A QUARTERLY JOURNAL OF MARITIME HISTORY

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PUBLISHED BY THE AMERICAN NEPTUNE, INCORPORATED
SALEM, MASSACHUSETTS

$6.50 a year $1.75 a copy

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Entered as Second Class Matter, February 26, 1941, at the Post Office at Salem, Massachusetts, under the Act of March 3, 1879. Additional entry at the Post Office at Portland, Maine.

THE AMERICAN NEPTUNE

A QUARTERLY JOURNAL OF MARITIME HISTORY

Volume XIV. No. 3
July 1954

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SALEM, MASSACHUSETTS

Published by The American Neptune, Incorporated, Salem, Massachusetts

Printed by The Anthoensen Press, Portland, Maine

Collotype plates by The Meriden Gravure Company, Meriden, Connecticut

THE AMERICAN NEPTUNE

A Quarterly Journal *of Maritime History*

VOLUME XIV JULY 1954 NUMBER 3

SHORTLY *after the last number of* NEPTUNE *had gone to press I received a letter from Mr. John Youell saying that he was mailing me a copy of a book written by his father, Mr. George Youell, and published by him in* 1938. Lower Class *is a delightfully written autobiographical account of life in the last half of the nineteenth century in a small rural East Anglian village, and on board North Sea fishing vessels sailing from the seaports of Yarmouth and Lowestoft. The book was overprinted and Mr. John Youell, who has the overstock, would be pleased to give copies to people who might be interested in reading it. After examining the book I suggested to Mr. Youell that I mention this in the next* NEPTUNE *editorial as there may be a number of readers who will like to avail themselves of his generous offer. Anyone interested should write to Mr. John Youell, whose address is* 3900 *N. W. Yeon Avenue, Portland* 10, *Oregon.*

Since we discontinued reviews there has been a far better coverage of books and articles in the maritime field in Mr. Albion's bibliographies, but there is little space for comment which must be restricted to a line or two on the more significant publications. Thus, as I started this editorial on a book it seems fitting to finish it on the same subject and take the opportunity to comment on two or three other recent works.

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A few years ago Samuel Eliot Morison set a new standard for the writing of company histories in his history of the Plymouth Cordage Company. A book which maintains this high quality is the recent Union-Castle Chronicle 1853-1953 *by Marischal Murray. The story of the exciting struggle between The Union Line and its great rival, The Castle Line, for the services between England and South Africa is well told. After the amalgamation of the two companies in* 1900 *the history of the line continues through two world wars, during which several of their ships were sunk, and the great economic depression, which nearly spelled disaster. The men who guided the destiny of the line and the many ships they owned are featured, but the nearly four hundred pages contain more than a history of a steamship line. Throughout the volume runs the settlement, wars, and economic vicissitudes and prosperity of South Africa. And the thread tying it all together is the by no means small part played by the Union-Castle Line in the development of that country. The book is superbly illustrated with many plates in color.*

I have been waiting since last autumn for a suitable opportunity to take some particular notice of M. V. Brewington's Chesapeake Bay: A Pictorial Maritime History *which followed quick in the wake of Arthur Pierce Middleton's* Tobacco Coast: A Maritime History of Chesapeake Bay in the Colonial Period. *These two books supplement each other admirably.* Tobacco Coast *is primarily concerned with the commercial history of the Bay, with its dependence upon the flourishing tobacco industry and all its ramifications, until the Revolution. Brewington's book will have more appeal to the ship lover for the author has assembled a remarkable collection of pictures of the many types of craft for which the Bay is famous. But it is far from being a picture book only for his illustrations are held together with brief chapters of readable text. It is good to have on the shelf these two fine volumes on a body of water graced with as rich a maritime history as any on the Atlantic seaboard.*

ERNEST S. DODGE

Peabody Museum of Salem

Queen of the Hudson

BY DONALD C. RINGWALD

PART I

I ATTEND to my own boat and nobody else's.'

Captain Absalom L. Anderson, who spoke those words, did indeed attend religiously to his own boat. Further, he cared for her with pleasure and pride and lavished upon her every sort of attention, for he loved her. Other people's steamboats! There was little about them to distract him, because, as far as he was concerned, his was the finest that had ever turned a wheel. The people who agreed with him were legion, for his steamboat was *Mary Powell.*

Built in 1861 for Captain Anderson's line, she was commanded by him and later by his son, Captain A. Eltinge Anderson, for over forty years. That alone is unusual, but the unusual was part of *Mary Powell.*

One of the fastest steamboats of her time, she was trim, comfortable and, above all, reliable. For over half a century she ran on the same route on the Hudson River and many who commenced traveling on her in their youth were still patrons when they were dignified old ladies and gentlemen. To them and countless others of her faithful followers, the only proper way to journey was aboard *Mary Powell,* for she was a 'family boat' upon which one found the same atmosphere he would expect in his own dwelling. Captain Anderson established her as such, and she was never anything else. Passengers who could not conduct themselves accordingly were not welcome.

To those who lived in the section of the river which she served for so long, she brought all the good things of life—pleasant outings, delightful trips to the 'City,' eagerly awaited friends and relations, and excitement of the type that only a beautifully proportioned steamboat could create. They loved her, too, and occasionally one amongst them came aboard even in death, for there were a few who specified that *Mary Powell,* which had carried them so often in life, was to transport them home for the last time.

She came to be regarded as an integral part of the river, but her fame was by no means confined to the Hudson valley. Her route was such that it was used by tourists and travelers, both humble and great, from all over the nation and from abroad as well. Going on their way, they carried along pleasant memories and stories of that paragon of river steamers on which they had sailed on the Hudson. Year after year, by word of mouth and by writings, her name spread until it was known in many parts of the world. Perhaps the happiest incident to cite in this respect is one which concerned A. L. Anderson himself. It is said that while vacationing in Egypt, he embarked on a steamboat on the Nile and, in the course of conversation with the captain, was delighted to find that that gentleman had heard of only one American steamboat—*Mary Powell.*

Probably no boat had more friends. When she was at last retired, her passing was noticed by lengthy obituaries in all sorts of publications from small town newspapers to periodicals of international character.

For years maritime chroniclers have often chosen to indicate the high qualities of a particular steamboat by saying simply, 'She was like the *Mary Powell.*' It seems that such a statement will continue to be made as long as there are writings about steamboats, for never again will her like be seen.

The following is an endeavor to show how she came to be; to define her route; and to tell something of her story.

The Background and the Building

In 1828, the Delaware & Hudson Canal Co. opened its canal over the full length between Rondout Creek, a tributary of the Hudson River, and the coal fields of northeastern Pennsylvania. The company had established a base of operations along the creek and in that area there grew up and flourished the community of Rondout, with a bustling waterfront that served as a magnet for boatmen from far and wide.

Amongst the many attracted was Captain Nathan Anderson, who arrived in the 1830's.[1] Although engaged in sloop transportation on the Hudson, the captain was not a man to let progress pass him by and in June of 1839 he and a partner named James A. Taylor became the Rondout agents for the steamboat *Emerald,* which Captain John Ketcham was then operating between there and New York City.[2] In 1841 the firm became Anderson, Taylor & Co. to include a son of Captain Nathan's, Absa-

[1] He was a direct descendant of Isaac Anderson, who was born in England in 1649 of Scottish descent and who settled in Rye, N. Y., in 1680.—*Commemorative Biographical Record of Ulster County, N. Y.* (Chicago: J. H. Beers & Co., 1896), p. 72.
Nathan Anderson was born 25 June 1790 and died 4 June 1875.

[2] Anderson & Taylor and successors also engaged in the general grocery business.

lom L. Anderson, who had been born at Croton, New York, on 25 November 1812 and had come to Rondout with his father. On 1 March 1843, Mr. Taylor withdrew and the business was continued under the name of N. & A. L. Anderson.

Through the years the Andersons garnered considerable experience in steamboat transportation and in 1848 joined with William F. Romer, at that time cashier of the Kingston Bank, to form Anderson, Romer & Co.'s Barge & Steamboat Line, which in 1850 was restyled Anderson, Romer & Co.'s Freight & Passage Line. The Andersons participated in this enterprise for about half a decade and then in December of 1852 the news was confirmed that they were to sell their interest, which, indeed, they did.

In the following May, Captain A. L. Anderson prepared to move to the small village of Saugerties, New York, for he had invested in the steamboat *Robert L. Stevens,* running between there and New York City. By the fall of 1855, he was arranging to purchase the noted and speedy *Thomas Powell*[3] to supersede the declining *Robert L. Stevens,* but in this step the captain erred in judgment. As he discovered during the season of 1856, *Thomas Powell* was beyond the requirements of the Saugerties line. Knowing that he had at least an excellent steamboat, he looked about for a route to match her and, in 1857, put her in service as a day boat between Poughkeepsie, way landings and New York. This arrangement, by which she left Poughkeepsie in the morning and returned from New York in the afternoon, proved successful.

The last similar service between Rondout Creek and New York City had been provided by *Alida,* which had been hauled off after the season of 1855. The natives of Rondout and of the neighboring village of Kingston suddenly decided that they had never fully appreciated *Alida.* A morning boat to New York was a convenience they found themselves missing and they felt that Captain Anderson would find it to everyone's advantage if he extended *Thomas Powell*'s route sixteen miles to Rondout. As a matter of fact, in anticipation of additional revenue with slight additional expense, Captain Anderson felt the same way himself and was no doubt primarily responsible for the reawakening of interest in a New York day boat from Rondout. He decided he would lengthen his line in 1858.

The initial sailing to Rondout was made from Jay Street, New York, at 3:53 P.M. on 24 April 1858. The regular schedule, commencing 26 April,

[3] *Thomas Powell* had been built for Thomas Powell, a prominent businessman of Newburgh, N. Y., and his son-in-law, Homer Ramsdell, for use on the route between New York City and Newburgh. She made her first trip between those places on 30 April 1846. Later she was sold and ran elsewhere, including Delaware River service to Cape May.

She was enrolled at New York (No. 30) on 19 April 1856, with Absalom L. Anderson as sole owner. Previous enrollment at New York, 2 September 1855, listed Oscar Hoyt as owner.—The National Archives, Washington, D. C.

provided service from Mondays through Saturdays, on which days *Thomas Powell* left Rondout at 5:30 A.M., made way landings, arrived at Jay Street after a run of about ninety miles at 11 A.M., and left on the return at 3:45 P.M. This route was now to be maintained for sixty years.

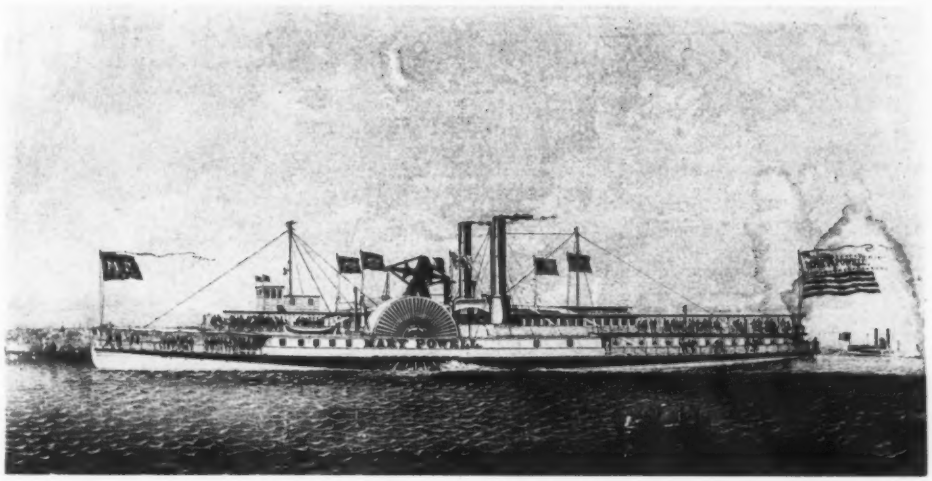
Two years later, in 1860, a period of replacement of the older steamboats in service on the Hudson was ushered in by the appearance of the fleet *Daniel Drew* on the day line between New York and Albany. She immediately monopolized waterfront conversation and new boats became the topic of the hour. Captain Anderson, of course, realized that he would in time have to build a modern steamboat for his own line, the prosperity of which was due in a large measure to the excellent service it offered. Fine as *Thomas Powell* was, she was no longer young. Therefore, in August, he announced that he, too, would build a new boat and he emphasized that she would be faster than *Thomas Powell* or any other Hudson River steamer, thereby covering *Daniel Drew*.

Actually, the captain was not yet quite ready to go beyond the talking stage. Romer & Tremper,[4] proprietors of one of the two night lines between Rondout and New York, were building a steamboat and Captain Anderson was deeply interested in her. Launched on 19 November 1860 at Michael S. Allison's yard at Jersey City, New Jersey, as *James W. Baldwin,* she was engined by Fletcher, Harrison & Co. and entered service in March of 1861. She was a pronounced success.

Shortly afterwards, it was announced that Captain Anderson and his associates had awarded a contract to Mr. Allison to build a steamboat guaranteed to be faster than *Thomas Powell* by 1 mile in 12. Mr. Allison was left to work out the proportions with this end in view, while Fletcher, Harrison & Co. agreed to furnish an engine that would be as fine as or better than any thus far constructed. The total cost was expected to be about $80,000.

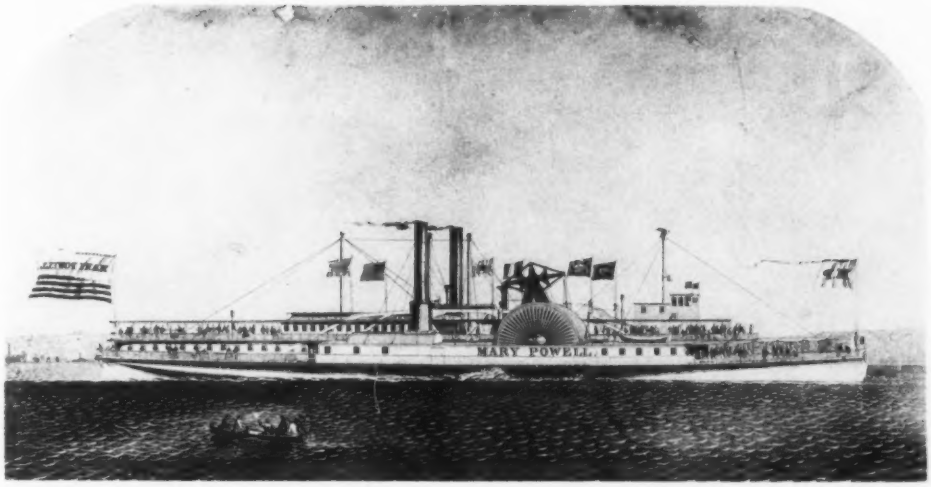
The name *Thomas Powell* conjured up to a host of satisfied and loyal passengers a picture of all that was best in rapid and comfortable steamboat transportation. To capitalize on this good will, Captain Anderson decided to name the new boat after the seventy-six-year-old widow of Thomas Powell, Mrs. Mary Ludlow Powell, the daughter of Robert Ludlow and Elizabeth Conkling Ludlow. Three of Mrs. Powell's brothers and her half brother, Robert W. Jones, had been officers in the United States Navy. During the War of 1812, one, Robert C. Ludlow, was purser on *Constitution* at the time of her encounter with H.M.S. *Java*. Another, Augustus C. Ludlow, was James Lawrence's first lieutenant on *Chesa-*

4 Successors to Romer, Tremper & Gillett, who had succeeded Anderson, Romer & Co.



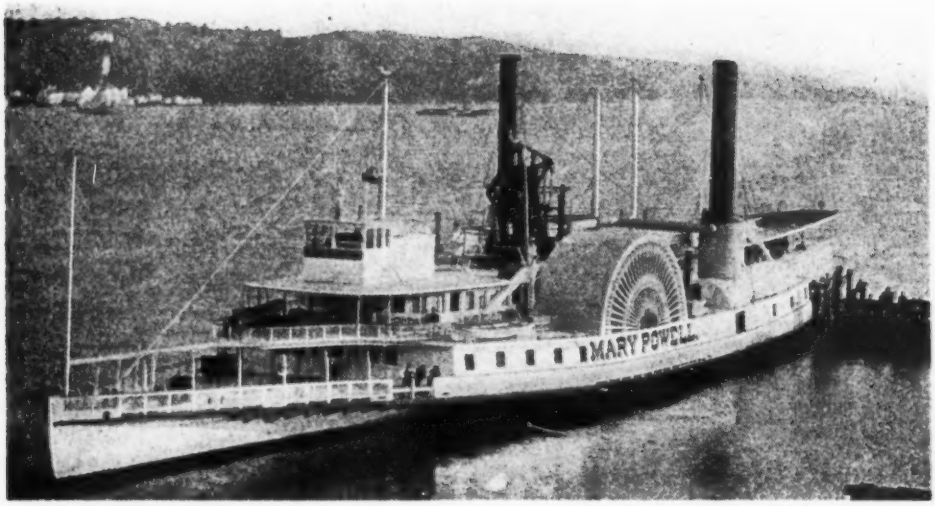
Mary Powell as she originally appeared, during the season of 1862. From a lithograph by Endicott & Co.

Courtesy of The Mariners' Museum, Eldredge Collection



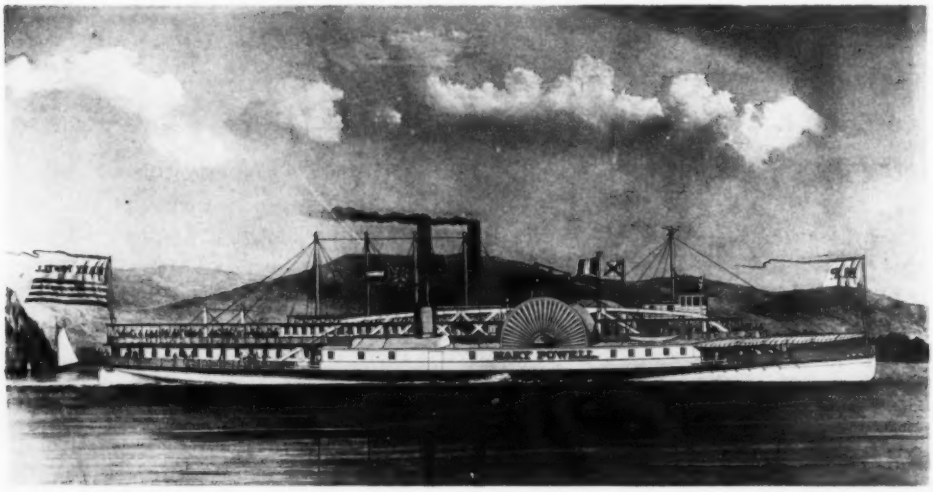
After being lengthened twenty-one feet aft of the wheelhouses. This was done in the fall of 1862. From a lithograph by Endicott & Co.

Courtesy of Elwin M. Eldredge



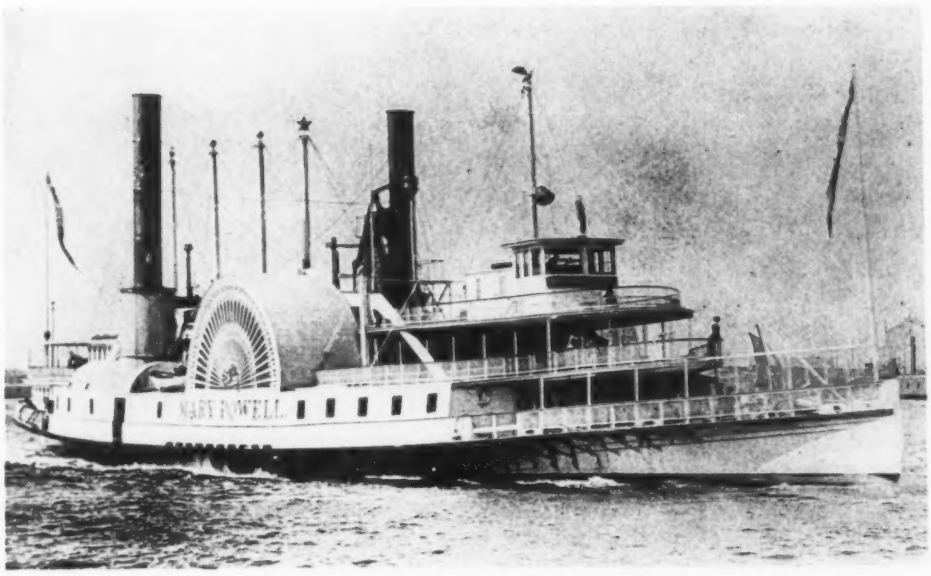
Mary Powell, showing the enlarged main saloon which she carried during the seasons of 1869-1872

Author's collection



After the alterations of 1874-1875. From a lithograph by Endicott & Co.

Courtesy of Elwin M. Eldredge

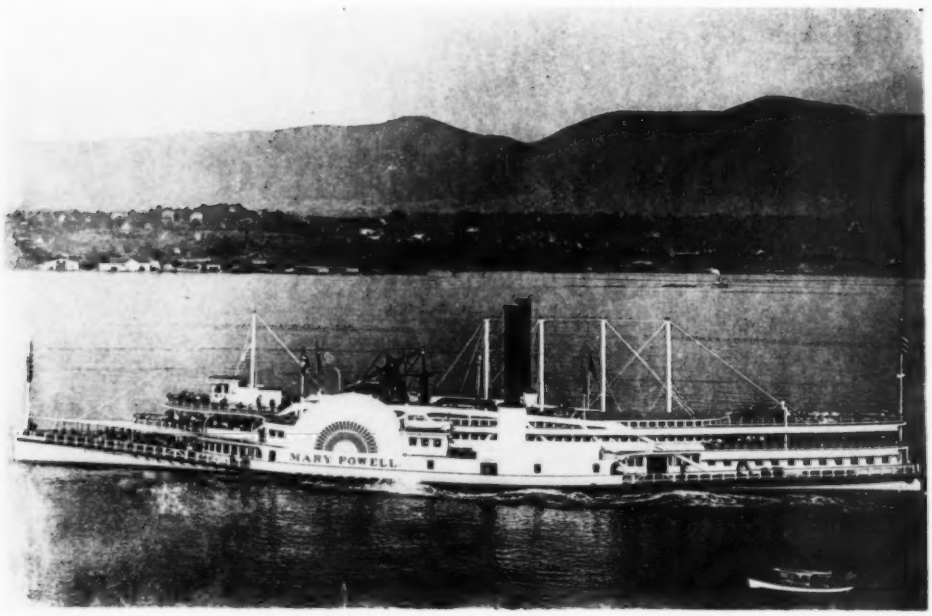


After the alterations of 1880-1881

Courtesy of Elwin M. Eldredge

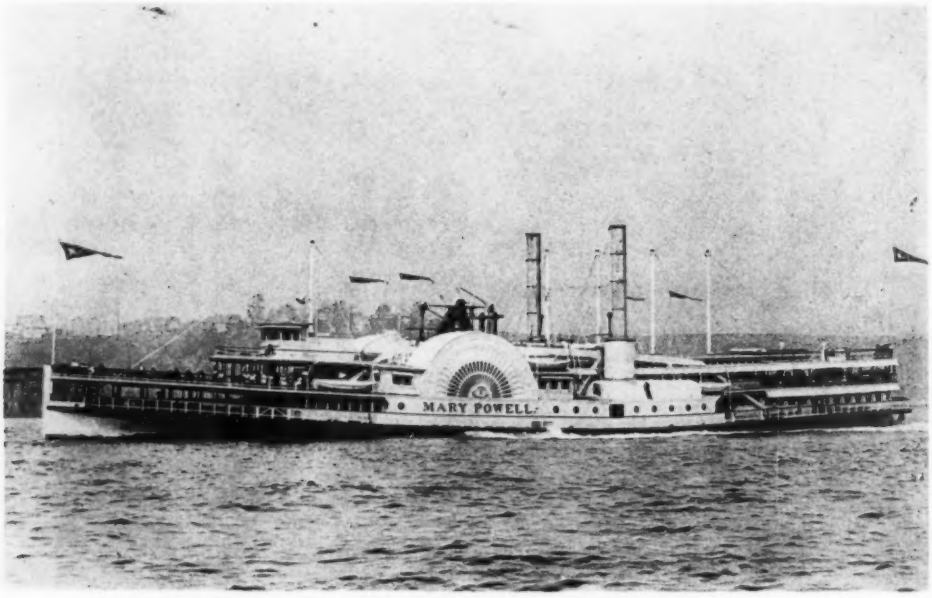
The 'new' *Mary Powell* after the alterations of 1887-1888

Courtesy of Elwin M. Eldredge



Mary Powell, showing the observation parlor on the promenade deck ahead of the wheelhouse. One on either side was added in the spring of 1894

Courtesy of Elwin M. Eldredge



In her last years, after the alterations of 1903-1904

Courtesy of Elwin M. Eldredge

peake in the engagement with H.M.S. *Shannon* and died of wounds received in the battle.[5]

By the afternoon of 29 July 1861, all was ready for the launching but, to the dismay of the assemblage, there was none. Neither Mr. Allison nor his tried artisans could get the new boat off the ways. *Mary Powell* was late on her first trip! A postponement until 1 August was decided upon and apparently on that day she was successfully water-borne.[6]

In mid-August, while *Mary Powell* was lying at the foot of Vestry Street, New York, where her machinery was being fitted, a reporter for the New York *World* would appear to have been amongst the first to employ the title which, in later years, became hers by common usage. He wrote, 'Captain Anderson, her popular commander, expects to have his "Queen of the Hudson" ready for a trip up to Rondout about the 1st of October next.'[7]

Mary Powell made a trial trip at New York on 9 October. By that time, Captain Anderson's expectations of August had grown into determination. He simply had to try her out on the Rondout run before service ended for the season.

When *Thomas Powell* arrived in New York on Saturday, 12 October, he announced that she would have to be taken off temporarily for repairs made necessary by a slight encounter with a New York ferryboat. Furniture, dishes and silverware were rushed over from the 'Tom' to the 'Mary,' stoves were set up to combat the autumnal chill and canvas was nailed over some of the glassless windows. The joiners,[8] glaziers and painters still had considerable work ahead of them and Captain Anderson regretted officially that he had to use the new boat in such an unprepared state. Nevertheless, representatives of the upriver press were aboard *Mary Powell* when she set off on her first 'unplanned' voyage to Rondout.

[5] E. M. Ruttenber, *History of the County of Orange with a History of the Town and City of Newburgh* (Newburgh, N. Y.: E. M. Ruttenber & Sons, Printers, 1875), pp. 400-401.

Mary Ludlow Powell was born 20 June 1785 and died on Thanksgiving Day morning, 28 November 1867, at Newburgh, N. Y. She lies buried in St. George's Cemetery in that city.

Augustus C. Ludlow, like Lawrence, was interred in Trinity Churchyard in New York City.

[6] Information as to the unsuccessful attempt at launching was supplied by W. duBarry Thomas from the *American Standard*, Jersey City, N. J., 30 July 1861, which also stated that the launching would probably take place on 1 August.

Some newspapers assumed that a launching took place on 30 July. For example, said *The Kingston* (N. Y.) *Argus & Ulster Republican* on 31 July 1861:

'The Mary Powell afloat.—Yesterday at 11 o'clock, the new steamer . . . was launched . . . . That is, the craft was to glide into the Hudson and we presume it did so, for Anderson, Allison and Ketcham usually do what they set about . . . .'

The Rondout (N. Y.) *Courier* on 2 August 1861 reported,

'The new steamer *Mary Powell*, built at Jersey city [*sic*] to take the place of the *Thomas Powell*, if it prove [*sic*] a faster boat, was launched yesterday.'

[7] *The World*, 16 August 1861.

[8] *Mary Powell*'s joiner work was done by John E. Brown.

Her recorded time was about 5 hours 15 minutes. From Jay Street to Dobbs Ferry, she did, it was said, approximately 21.6 statute miles per hour and was then slowed considerably. Some thought the captain had erred in running such an obviously unfinished steamboat, but it was late in the season and traffic was light. Under the circumstances, nobody was unduly upset.

In fact, one enthusiastic passenger who was aboard on 12 October, wrote, '. . . if the Mary Powell is like other feminines, we saw the lady under the precise circumstances to judge of her best qualities—for experts say that to find out the true character, temper and trim of a demoiselle you must surprise her at home and in neglige.'[9]

After running *Mary Powell* briefly, Captain Anderson put *Thomas Powell* back in service until 30 October, when the season ended.

On Saturday, 2 November, *Mary Powell* came up to Rondout and later went into winter quarters at Port Ewen along with *Thomas Powell*. The latter boat was disposed of during the winter to the Catskill Steam Transportation Co. for $35,000 and put in many more years of useful service.

Shortly after the river opened in 1862, *Mary Powell* went to New York to receive her furniture and be put in final condition. Her official measurements were, length, 267 feet; breadth, 34½ feet; depth, 9 feet 2 inches; and tonnage, 819 81/95. Captain Anderson owned half of her; old Captain John Ketcham, for whom Captain Anderson and his father had once been agents, owned one quarter; and John L. Hasbrouck, one quarter.[10]

Mary Powell was, like her predecessor, a wooden-hulled side-wheeler, with a vertical beam engine supplied with steam by two boilers set on the guards, and was painted white with black stacks. The hull was divided into three watertight compartments and was strengthened in the usual manner with a hogframe and stays from three spars—one forward, topped by a large, gold eagle, and two aft, topped by gold balls. The engine, Fletcher, Harrison & Co.'s No. 17, was of 62 inches diameter of cylinder by 12-foot stroke.[11]

As she was arranged that year, *Mary Powell* had a ladies' saloon on the main deck, aft. Forward of it, the deck over the hull itself was obstructed only by the engine and the shafts. The barroom was located over the guard

9 *The Kingston Argus & Ulster Republican*, 16 October 1861.

10 From the first enrollment at New York, 25 April 1862. *Mary Powell*'s official number was 16982. —The National Archives.

The final cost was evidently close to the original estimate. *The Home Journal* of New York, 19 October 1861, mentioned that, including furnishings, it would be about $80,000 and very likely got the information from Captain Anderson.

11 Information as to engine number from Elwin M. Eldredge.

and the dining room was in the hold, where were also a few staterooms for the benefit of those who might be ill or fatigued.

On the promenade or second deck was situated the small main saloon, extending from aft of amidships to a point astern of the after gangway. Captain Anderson genuinely loved the river scenery which contributed notably to the annual income, and believed in the benefits to be derived from fresh air. So that his passengers might share both with him, he had placed in the saloon unusually large windows, with sliding sashes and blinds, cut sufficiently low so that one could look out while seated comfortably within. To provide a novel decoration, he ordered transferred to glass, portraits by Brady and other noted photographers of the day of individuals who at one time or another had lived in the valley of the Hudson. These, used as clerestory windows, comprised an intriguing gallery. Naturally, there were included Mrs. Mary Powell; her late husband, Thomas; and her son-in-law, Homer Ramsdell.[12]

The hurricane deck, or 'third story,' was not open to passengers and on its forward end was the pilothouse.

Wherever practicable throughout the boat, folding and glass doors were installed instead of the usual small wooden ones. On the interior, paneling of polished wood was used as much as possible and painting kept to a minimum.

The paddle boxes were embellished by the popular fan design and that year the lunettes were decorated with views of the Powell residence at Newburgh.

For fire protection and use in other necessary pumping, a Worthington donkey engine was carried.

Over this domain ruled Captain Absalom L. Anderson. Ever since the days when he had commanded *Highlander*,[13] the first steamboat to be operated by Anderson, Romer & Co., he had established a reputation for competency, courtesy and efficiency which had grown with the years. The comfort and welfare of his patrons were always uppermost in his mind and, in return for the devoted loyalty which they showed him, he spared nothing to make their trips on his steamboat a delightful interlude. For example, later on he arranged to have a bundle of New York morning

[12] Amongst the others were General Winfield Scott; S. F. B. Morse; J. J. Audubon; Washington Irving; Matthew Vassar; James Gordon Bennett; A. J. Downing; Nathaniel P. Willis; Henry Ward Beecher; Benson J. Lossing; Captain Anderson's father, Captain Nathan Anderson, and his father-in-law, Dr. Richard Eltinge; Major L. A. Sykes, Rondout agent for the Delaware & Hudson Canal Co. The meticulous artist who portrayed *Mary Powell* for the first two Endicott & Co. lithographs of her, included vague portraits on the clerestory windows.

[13] *Highlander* had been built originally for Thomas Powell and Captains Samuel Johnson and Robert Wardrop for the Newburgh and New York route, on which she entered service in 1835.

newspapers sent daily to Tarrytown by railroad. There they were carried out in the river in a small boat and picked up by *Mary Powell* when she came down so that the passengers might be completely informed as to the day's news by the time they arrived in the city. On one occasion, the small boat was pulled against *Powell* by the suction and wrecked, but the papers were saved!

To Captain Anderson, an acceptable steamboat was one that combined equally speed, safety, comfort and lines. He felt that when the proper balance of a perfect engine in a perfect hull had been achieved, nothing should ever be done to disturb it. 'Keeping down the weight' became a fetish with him.

He believed that a timetable was arranged for a purpose. Once, while he was on *Highlander,* he gave an entire company of militia an excellent though receding stern view of his steamboat because they failed to keep that fact in mind. But in simple speed for speed's sake, he insisted on safety first.

Commanding a steamboat he felt to be the noblest of callings. He did it better than almost anyone else and he thoroughly enjoyed it. One day a departing passenger friend stopped on the gangplank and said to him, 'Captain, I believe you'll run a steamboat in Heaven!'

Captain Anderson drew himself erect and, in his clear voice, snapped back instantly, 'I don't know why not!' [14]

His crew, if they were to remain, followed his example of courtesy and thoughtfulness towards the passengers and *Mary Powell* gained a lifelong reputation in that respect. In return, the passengers were expected to remember that she was a family boat. Those who forgot it were never encouraged to return.

The captain's clerk was his son, Jansen Hasbrouck Anderson, born 9 February 1844.[15] He had received his higher education at Nazareth Hall, a Moravian school in Pennsylvania.

[14] Incident recalled by a witness, from *The Kingston* (N. Y.) *Daily Freeman,* 15 July 1914.

[15] In the nineteenth century on Hudson River passenger steamboats, the captain, who was often the owner of or a stockholder in his command, was generally primarily concerned with conducting the boat's business, while the pilot largely handled the navigating. The captain's assistant was at first known by the plain title of 'clerk,' but this gave way to '2d captain' and 'purser.' Whatever his title, he was an important personage, for the line of advancement was mainly through the steamboat's office rather than the pilothouse. Even those few captains who had been either steamboat pilots or sloop skippers usually owed their elevated station to their business acumen, which was the principal qualification.

It must not be assumed, however, that the captain was not in absolute command of his steamboat. Many of the old-time captains went to the pilothouse whenever they felt the necessity, told the engineer how much steam he could carry, collected the fares, kept a watchful eye over the dining room, saw to it that the passengers were comfortable and enjoying the trip, officiated at landings at the main deck gangway, and otherwise kept every activity aboard very much under their thumbs.

The pilot, thirty-one-year-old Guernsey B. Betts, had started his river career at the age of twelve on a Hudson River sloop and became in time as much of a model of a Hudson River pilot as Captain Anderson was of a Hudson River steamboat captain. Assisting in the pilothouse was Daniel Hoffman Bishop, who was both mate and assistant pilot. Mr. Bishop had gone on the river as deckhand on the steamboat *Splendid* at a time when Guernsey Betts was her pilot. Both men had later gone on *Thomas Powell*.

In addition to these, there were also in the crew two engineers, four firemen, four deckhands and the personnel in the steward's department.

The Route

The idea of a morning day boat from upriver landings to New York and return was not an original conception of Captain Anderson's. He entered that service, as has been stated, in an attempt to find profitable employment for a steamboat too big for the route for which he had bought her. The time was right, his steamboat was superior and he was popular. Hence, through the years, Anderson, *Powell*—first *Thomas* and then *Mary*—and 'morning boat to New York' became synonymous.

There was, of course, regular day service between New York and Albany, by which a steamboat left both places in the morning and touched at the principal landings along the way. Also, there was a fleet of night boats between New York and most of the landings on the river. The route which Captain Anderson reinaugurated was intended to provide steamboat service at hours when transportation was not available by either the through day boats or the night boats. It enabled the man who had business to transact or the family with shopping to do, to arrive in New York late in the morning with between four and five hours in which to accomplish the mission, and be back at home early in the evening. Many prosperous businessmen maintained summer homes along the Hudson and the more fortunate of these adopted the route as a pleasant means of daily commuting. The others regularly went down on Monday morning and returned to rejoin their families for the week end on Saturday evening. Vacationists found it a comfortable way to leave the city or return to it and the traveler who wished to arrive in New York during the morning or to leave later in the day without using the night boats, was enabled to do so. For those who wanted an outing, combining a sail on the river and sightseeing in New York, it was ideal.

Although *Mary Powell*'s timetable changed with the years, the following gives a general idea of the schedule:

Lv.	Rondout	5:30 a.m.	Lv.	New York	3:30 p.m.
	Poughkeepsie	6:30	Due	Cozzens'	about 6:00
	Milton	6:45		West Point	6:10
	New Hamburg	7:00		Cornwall	6:30
	Newburgh	7:30		Newburgh	6:45
	Cornwall	7:45		New Hamburg	7:15
	West Point	8:05		Milton	7:30
	Cozzens'	8:10		Poughkeepsie	7:45
Ar.	New York	10:45 a.m.		Rondout	8:30 p.m.[16]

Rondout (with adjoining Kingston), Poughkeepsie and Newburgh were communities of size. Milton, New Hamburg and Cornwall were small. Cozzens' was primarily a hotel landing, while West Point was a military reservation. All were on the west bank of the river except Poughkeepsie, New Hamburg and New York.

Mary Powell's heavy movement of traffic was from these landings to New York and from New York to the way landings. Consequently, she adhered rigidly to her southbound schedule. Coming north, on the other hand, when she was bringing her passengers back from the city, the times at which she was due were considered to be average times only and she might be earlier or later than due, depending largely on the tide. Those few people who would be coming aboard at the way landings were expected to be familiar enough with the steamboat to keep this fact in mind.

Half past five in the morning was not then thought to be so early as it is today and promptly at that hour *Mary Powell* took in her lines and started out Rondout Creek. Passing the mouth into the Hudson by Rondout lighthouse, she rounded to the southward and, with her walking beam moving in steady rhythm, was away on her run to New York. By the time she got into beautiful Newburgh Bay, with three landings behind her, the hour was nearing 7:30 and, to those on *Powell*, the day was well advanced. Landing first at Newburgh and then at the lower end of the Bay at Cornwall, she entered the northern gateway of the Highlands, those hills which rise abruptly from the Hudson and resolutely confine its water. In the Highlands were two more landings, West Point and Cozzens', only a few minutes apart, after which she was free for over two hours, with nothing to hinder her from there to her destination.[17] With

[16] Rondout and the neighboring village of Kingston were consolidated by the formation of the City of Kingston in 1872, but the waterfront section continued to be known as Rondout. To avoid confusion, that name has been used throughout this article.

In September the sailing time from Rondout was often changed to 6:00 A.M. Full notes on this and other changes in schedule, on changes in landings, and on the New York termini, will be found in Appendix II.

[17] On Monday mornings, every effort was made to get the returning businessmen into New York on time and *Mary Powell* was usually let out over the long stretch from Cozzens' into New York.

her paddles thumping and her swells rolling off astern, she swept on across the broad expanses of Haverstraw Bay and Tappan Zee, down along the Palisades and on into New York.

By mid-afternoon, she was on her way back, speeding once again towards Rondout. On this return trip, as Captain Anderson liked to point out, the passengers saw 'the Hudson Highlands "at the gloaming," the finest hour for Mountain and River Scenery.'[18]

For most of the passengers, the scenery along the Hudson, in the Highlands or elsewhere, and the activity on the river, with the passing steamboats and the long tows of canal boats, were ample entertainment. Others explored *Mary Powell,* visited with friends, exchanged the news of the day or watched the fascinating movements of the engine. Meals were served and a full-course breakfast or a bountiful dinner could provide a delightful interlude during the trip.

In the seventies, *Mary Powell*'s Negro waiters, who hailed from Virginia, often rendered concerts with guitar accompaniment in the dining room after Poughkeepsie had been passed and *Powell* was running home on the last lap to Rondout. Sometimes, carried away by their own music, the waiters would continue far into the night and on many an evening the good people who lived near the Powell Dock on Rondout Creek were entertained by the soft notes of old plantation melodies drifting up from the sleeping steamboat. These '*Mary Powell* Singers' in time became a noted feature of the boat.

Later on, in keeping with the trend, an orchestra was carried and printed programs outlined the daily concerts.

Mary Powell operated on her route from Mondays through Saturdays only.[19] No service was ever maintained on Sundays. The length of the seasons naturally varied, but for most of the years they began in the last half of May and extended into October. The longest of all was in 1866, when the first trip was made on 23 April and the last on 5 November.

Mary Powell's opening trip in the spring was usually an event along the river and in her own particular bailiwick from Cornwall to Rondout the people often turned out in a body on the landings to greet her with bonfires, gun shots, fireworks and illuminations. At Newburgh, Commodore Homer Ramsdell, son-in-law of her namesake, sometimes had a cannon hauled to the top of one of his warehouses to fire salutes. On the first trip,

[18] Frequently used, with variations, in advertising.

[19] In advertising for the route in the early years, sailings were listed for 'every day,' 'every morning,' 'every afternoon.' 'Every' was here used in the same sense as 'daily' was then generally used, i.e., every day except Sunday.

Mary Powell's whistle was seldom silent and the expenditure of steam was immense.

Although the service was for passengers only and no freight was ever carried, in the days when the traveling public went summering with all the comforts of home they provided their own substitute. On one occasion in 1874, a party of eight went from New York to Cornwall with the formidable array of forty trunks. On the Saturday up trips in that period, when there might be some 1,500 or more aboard, the baggage reached truly mountainous proportions.

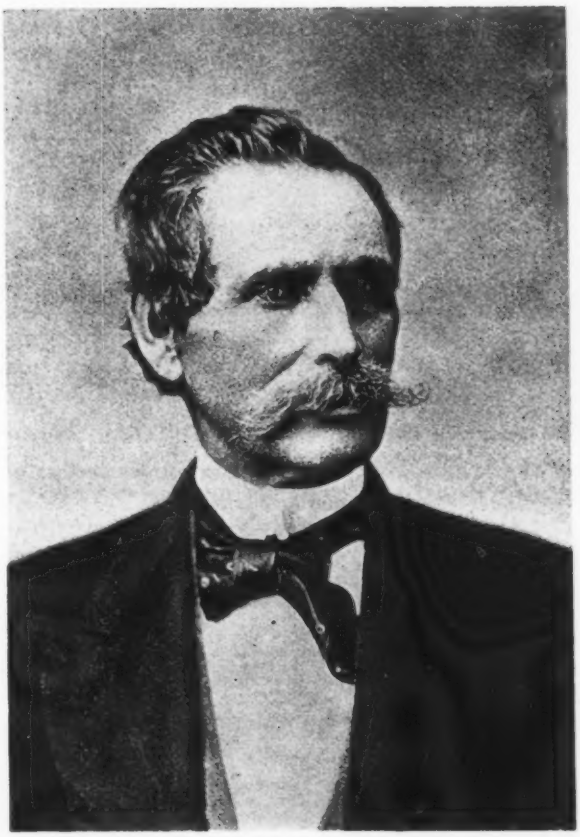
As for fellow passengers, one never knew whom he might meet aboard *Mary Powell*. It could be a man from the next block, a touring foreign visitor, a high official of state or a leading light of the stage.

In July of 1873, President U. S. Grant paid a brief visit to his friend, General George H. Sharpe, a Kingstonian who was then Surveyor of the Port of New York. On the morning of the 31st, the President, his host and the presidential party left General Sharpe's residence at 5 A.M. and were driven in an open wagon down to the Powell Dock, where the steamboat, with all her colors flying, lay waiting.

Upon going aboard, Grant purchased a local newspaper and, with General Sharpe, took a seat up forward, where he lighted his cigar and proceeded to study the news. One feels that to come aboard unsuspectingly at a way landing and find the President of the United States sitting across the deck, would be a bit of a shock. But things were like that on *Mary Powell*. That was neither the first nor the last time that Grant traveled on her.

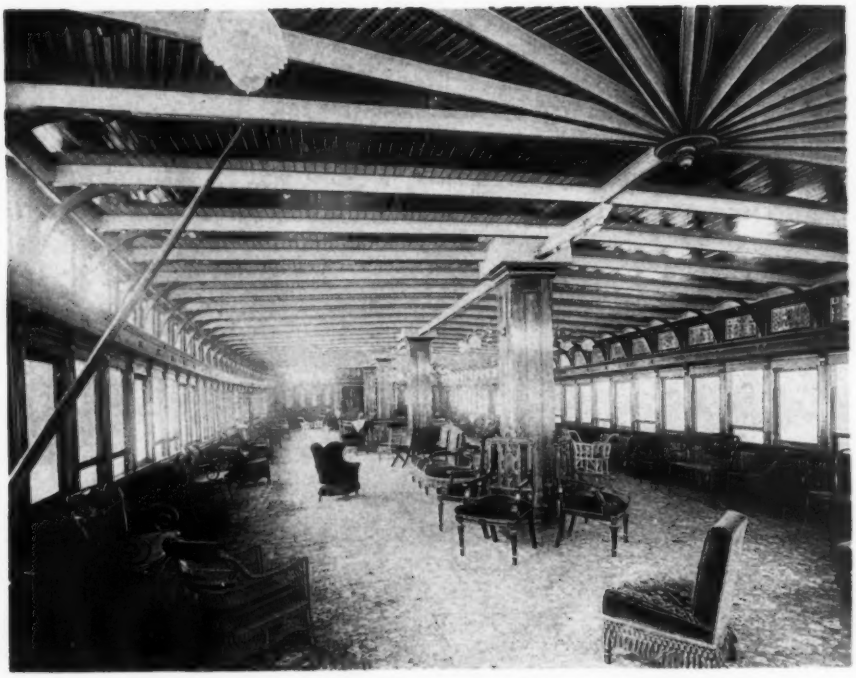
Of all her passengers, probably no one ever made a trip in a stranger place on her than did a fourteen-year-old boy in July of 1868. As *Mary Powell* lay at her New York pier, he gazed at her in admiration and decided that she was the answer to his problem of how to get a job. He would sail on her to Rondout where, he had heard, there was prosperity. Putting his plan into execution, the boy swam out to the steamboat, climbed up the buckets of her port paddle wheel and found himself a spot inside the wheelhouse where he could hang to the iron bars on the side. He reckoned not with the difficulty of traveling inside the wheelhouse of a moving steamboat.

After the trip had commenced, all of his shouts for assistance were effectively muffled by the beating of the wheels. When *Powell* reached her first landing at Cozzens', a run of about two and a half hours, a fireman heard the boy's feeble cries and found him half drowned, with his face and bare feet blue and wrinkled from the cold and continual soaking. He was

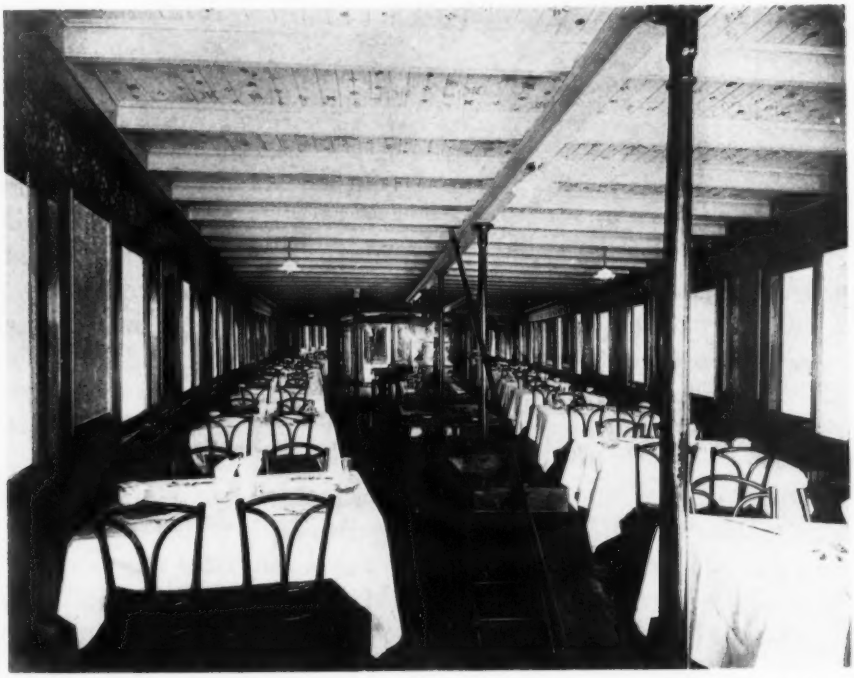


Captain Absalom L. Anderson

From Commemorative Biographical Record of Ulster County, N. Y. *Copied by W. duBarry Thomas*



Mary Powell's saloon, looking forward, after the alterations of 1887-1888
Author's collection



The dining room, looking forward, after the alterations of 1887-1888
Author's collection

barely able to hold on and it is amazing that he had been able to retain his position that long. Dried out in one of the firerooms, he was carried on to Rondout to disappear from the records of history.

Throughout her first season of 1862, *Mary Powell*'s only departure from her regular run was on Fourth of July, when she featured a trip to New York and a sail around Staten Island during the time when she would normally lay over. This Fourth of July excursion became an annual event and, in lieu of the Staten Island sail, she sometimes went to Coney Island or up the East River as far as Long Island Sound.

On 28 May 1874, Captain Anderson chartered *Mary Powell* to the junior class of Vassar College at Poughkeepsie, which had elected to entertain the senior class on an evening sail, going down the Hudson as far as Fort Montgomery and back, with some 120 students and the officers and faculty of the college aboard. This was *Mary Powell*'s first venture into pre-season excursions and began a happy custom. Later, Eastman College at Poughkeepsie followed the lead of Vassar and in the years to come other organizations and groups utilized her for special trips before she went on her regular run.

In 1884, *Mary Powell* made her last regular trip on 13 October and on the 15th left Newburgh at 8:15 A.M. on a post-season excursion to Albany, landing at New Hamburg, Milton, Poughkeepsie and Rhinecliff, which the Kingston people reached via the ferryboat from Rondout, and arrived at Albany at 1:30 P.M. with 812 passengers aboard. In time, this post-season excursion to Albany became a yearly affair. Then pre-season excursions to Albany were inaugurated and likewise grew into annual events.

Mary Powell engaged in many non-routine activities. On 10 October 1877, she carried the body of General George A. Custer from Poughkeepsie to its final resting place at West Point. On 28 October 1886, she went to the unveiling of the Statue of Liberty. During the centennial celebration of the first inauguration of George Washington, on 29 April 1889, she lead the first of ten squadrons of steamboats and tugs in the merchant marine naval parade. *Mary Powell* made special trips to the Columbian celebration in New York City in April of 1893, and on 27 April 1897 was chartered to take the West Point cadets to participate in the dedication of the tomb of one of her old passengers—U. S. Grant.

Worthy of mention, too, are the moonlight sails sponsored by Pilot Betts and Mate Bishop. For the night of 20 August 1872, this redoubtable team decided to assist their annual income by chartering *Mary Powell* from their employer and running a moonlight sail—a first class one, with music and dancing and without liquor. The excursion actually started at

West Point on the regular trip up, after which *Mary Powell* was supposed to lie in Rondout until 9 P.M., go straight back to West Point and once again come north, making all the regular landings to discharge the excursionists from those points.[20] As it happened, she was delayed off the mouth of Rondout Creek on her regular trip by a large tow bound out and, when she finally did enter the creek, was crowded to the edge of the flats, where she went aground for about twenty minutes. Actually, therefore, it was almost 10 P.M. before she started back for West Point and 3:30 A.M. before she ended her day at Rondout.

This would certainly seem to have been a heroic effort for the crew, since 3:30 A.M. was twenty-two hours after sailing time the preceding morning. They then had all of two hours in which to clean the steamboat, help coal her up and get her ready for her 5:30 A.M. sailing. It's nice to know that after all that effort, the Messrs. Betts and Bishop netted about $200 apiece.

The next year, when they once more took charge for their Second Grand Moonlight Excursion, they wisely chose 8 September, the eve of the day on which *Mary Powell*'s 6 A.M. sailings became effective that year. Thereby they gained for all concerned an extra half hour between the end of the moonlight and the commencement of the day's activities.

Owners, Alterations, and some Related Events

On Saturday, 3 May, *Mary Powell* opened her 1862 season from New York and on Monday, 5 May, began regular round trips from Rondout. Shortly after, Captain Anderson announced that she had matched the best time of *Thomas Powell* on the route and soon declared that her average time was more than one half hour better than that of her predecessor. He cited a trip on which *Thomas Powell* had left New York well in advance of *Mary Powell* which had made nine landings and had caught *Thomas Powell* off Port Ewen, just below Rondout lighthouse. He felt that this was a feat that no steamboat but *Mary Powell* could accomplish.

Actually, all things considered, it would hardly seem sensational. The sixteen-year-old *Thomas Powell* by now probably had had staterooms reinstalled, was likely carrying freight and was presumably making her way up the river on a leisurely schedule with no thought of fast time.

Most of this would appear to have been little more than the usual blasting of the trumpets to herald the entrance of the new arrival. *Mary Powell* may have been faster than *Thomas Powell*, and, indeed, she certainly

[20] In later years, this method of combining a moonlight sail with the regular run was many times used by *Mary Powell*. Generally, the trip was not as long as this one.

should have been. She was built expressly for that purpose and embodied years of experience and improvements in the construction of steamboats since *Thomas Powell* had been built. But afterwards, for the rest of the season, there was a strange silence, for *Mary Powell* had two major flaws. She was neither as fast nor as commodious as had been anticipated. Although Captain Anderson never would have admitted it, the title of 'Queen of the Hudson' would seem to have been premature.

All concerned were practical men and met the double problem head on. *Mary Powell* closed her season on 20 October and was then hauled out, lengthened 21 feet aft of the wheels and relaunched again in mid-November. This new section was intended to give added speed by improving the lines and balance, and naturally increased the capacity. It also made necessary the addition of another spar aft for strengthening purposes, placed ahead of the original two and topped by a star.[21]

When *Mary Powell* came back to Port Ewen to lay up for the winter, Captain Anderson felt that he now had a steamboat that was considerably more than just faster than *Thomas Powell*. He was right.

The enlarged *Mary Powell* went to New York on 30 April 1863 for final touches before beginning her season, which was scheduled to start on 6 May, but which didn't begin until the 13th. Captain Anderson gave inclement weather as the reason for the week's postponement. In any event, it was not long under way before *Mary Powell* commenced to turn up excellent runs in emphatic confirmation of the judgment shown in lengthening her.

The next year she commenced her season from New York on 30 April, but was hauled off briefly after two trips for repairs to one of her furnaces. That June she had placed on top of her pilothouse a hand-carved figure of the Goddess of Liberty, some six feet in height, which put in many years of sightseeing on the river.[22]

Mary Powell's reputation for speed was now so well established that in the fall it was understood that she was ready to enter into a post-season

[21] *Mary Powell* was not again enrolled until 30 April 1864. Her dimensions, as a result of the lengthening, were 288 feet x 34½ feet x 9 feet 2 inches; tonnage, 889 78/95. In compliance with legislation approved in 1864 and an amendment thereto approved in 1865, tonnage (gross) was changed to 983.57 by enrollment No. 117, New York, 8 May 1865.—The National Archives.

After net tonnage was adopted, *Mary Powell*'s net tonnage was 877.16.

Mary Powell was last carried in *List of Merchant Vessels of the United States—1919* (Washington: Government Printing Office, 1920), in which her dimensions were listed as 288 feet x 34.6 feet x 9.2 feet and her tonnages as 983, gross, and 877, net. The difference in inches in these dimensions and those of the 1864 enrollment resulted from legislation which changed the method of expressing portions of a foot from inches to tenths of a foot. Apparently *Mary Powell*'s dimensions were eventually changed in conformance with the law by the simple expedient of calling 6 inches 6/10ths of a foot and 2 inches, 2/10ths.

[22] This figure was still aboard in 1892, and is believed to have been removed in 1893 or 1894.

sweepstakes with all comers between New York and either Newburgh or Poughkeepsie, for a stake of from one to five thousand dollars to be posted by each boat entered. If there was but one opponent, a match could be arranged. Nothing further developed and she ended her work for 1864 on 18 October.

The last trip in 1865 was made on 7 October and soon afterwards the announcement was made that *Mary Powell* had been sold—sold, indeed, to Major Thomas Cornell for a reported $180,000.[23]

Thomas Cornell was no stranger to steamboating. He was a Steamboat Man. He owned a fleet of them, engaged in the towing trade on the river, and a night boat, *Thomas Cornell*, which formed a line between Rondout and New York with Romer & Tremper's *James W. Baldwin*. As a result, speculation was rife as to whether or not the Major might be intending to convert *Mary Powell* to a night boat and operate her and *Thomas Cornell* in competition with Romer & Tremper. The interest increased to the point where he took up his pen and wrote a communication.

To the Editors of the Po'keepsie Eagle.
Rondout, N. Y., Oct. 20 1865

Dear Sirs:—Please allow me to correct an article in your columns of last week:

The Steamer Mary Powell will continue on the route she has been running, the coming season, until the New Boat is completed, when it is intended to start the Mary Powell from Newburgh at an early hour, touching at the landings below, and arriving at New York about 9½ o'clock, the New Boat taking the through route to Rondout. The New Boat is to be 300 feet long, 40 feet beam, 10 feet hold, 62" cylinder and 16 feet stroke, intended to be the fastest boat in the world.

Truly Yours,
Thomas Cornell[24]

Alas! The New Boat was never completed, principally because she was never begun.

The loyal supporters of *Mary Powell* were saddened that Captain Anderson had elected to retire, but they did not begrudge him his new station. Although only in his early fifties, he was financially secure and was felt to have earned his rest. If the boat had to change hands, Rondouters knew that Thomas Cornell was the ideal man to operate her.

With the new regime came Captain Ferdinand Frost, up from Nyack

[23] This, of course, was for both the steamboat and a well developed and lucrative route.
Thomas Cornell was not alone in his purchase. *Mary Powell* was enrolled (No. 353, New York) on 17 October 1865, with Cornell as sole owner. The same day, she was again enrolled (No. 354, New York), with Thomas Cornell owning one half and Daniel Drew owning one half. On 26 February 1867 she was enrolled (No. 2, Albany, N. Y.) with Thomas Cornell once more sole owner.—The National Archives.

[24] *Poughkeepsie* (N. Y.) *Daily Eagle*, 26 October 1865.

to take command, with the Major's cousin, William H. Cornell, as clerk and with Andrew Barrett as first engineer. Pilot Betts and Mate Bishop remained aboard.

Captain Anderson was missed by the traveling public, but Captain Frost, we are assured, proved to be 'a trump.' He was also the subject of a little story that convulsed the same traveling public. The question was, 'Have you noticed that the mornings are quite cold on the *Mary Powell* this season?' If you were a proper straight man and replied that you had, you were told, 'That's because there's *Frost* on board!'

On Monday, 2 November 1868, *Mary Powell* made her last down trip of that year, lay overnight at New York and left at 7:30 A.M. to go up the river as far as Catskill, with way landings en route. It was Election Day and she was available free of charge to all who wanted to go home to vote. Thomas Cornell was standing for re-election to the House of Representatives on the Republican ticket and he doubtless hoped that all who went up in *Powell* would keep that fact in mind when they marked their ballots.

His magnanimity may have helped his cause, but it did not help it enough. He lost the election.[25]

In December, with the winter lull settling upon the river, negotiations were commenced between Alfred Van Santvoord and Cornell. The former, who controlled the day line between New York and Albany with the steamboats *Chauncey Vibbard* and *Daniel Drew* and who also operated a towing line, was interested in *Mary Powell* and Cornell was interested in some of Van Santvoord's towing steamers. The negotiations, several times broken off, were brought to a conclusion on 18 February 1869 when Thomas Cornell sold *Mary Powell* for $180,000.[26]

Mr. Van Santvoord immediately began work on *Mary Powell* to bring her into agreement with his idea of what a steamboat should be like. Although she was in winter quarters at Port Ewen, the first job of placing new buckets on her wheels was begun at once. She was far from ready

[25] Besides serving in the 40th Congress, Thomas Cornell was later a member of the 47th Congress, 1881-83. He was not a candidate for renomination.

It is unlikely that his defeat in 1868 had any connection with the events which followed.

[26] Two of the three side-wheel towing steamers which Thomas Cornell in turn purchased as part of this transaction were *New York*, a former passenger boat built in 1836, and *Oswego*, built in 1848 as the first large side-wheeler designed exclusively for Hudson River towing. It has been said that the third steamer was *Cayuga* and that Major Cornell immediately exchanged her with the Schuyler Line Towboat Association for their *Baltic* and the rights in the route between Rondout and Albany on which she was then operated. Such information as is available would indicate that this is correct.

Change in ownership of *Mary Powell* was shown on enrollment of 12 July 1869, with Alfred Van Santvoord owning one half and J. McB. Davidson, one half.—The National Archives.

Mr. Davidson was an associate of Mr. Van Santvoord's in the New York and Albany day line and was one of the incorporators when it was incorporated as the Hudson River Line in 1879. This company formally changed its name to the Hudson River Day Line in 1899.

when the season opened on 1 May and *Armenia,* the spare boat of the New York and Albany day line, was put on the Rondout run under Captain Frost until in June, when *Mary Powell* finally reappeared.[27]

Some $30,000 was reported to have been spent on her. The most obvious alteration was a great increase in the size of the main saloon, which now extended up to a point ahead of the forward spar. On the interior of the saloon, the wainscoting was of solid walnut and the furniture of walnut and gold, with mottled walnut panels and gilt inlaid stripe enlivened by upholstery of bright blue velvet. Large mirrors were set about and the stairway leading up to it was enclosed with glass doors.[28]

Also amongst the innovations was a smoking room, presumably in the hold.

Mary Powell continued as usual on her route through the season of 1871, which was not highly profitable and was a short one, closing on 2 October. She was then placed briefly on the New York and Albany day line, running with *Daniel Drew* in place of *Chauncey Vibbard,* which was withdrawn so that a major overhauling of her could be commenced.

That was *Mary Powell*'s last work for Van Santvoord. Early in January of 1872, announcement was made that Captain A. L. Anderson had once again gained possession of her.[29] For six seasons he had watched his beloved steamboat sail under other hands and restful life ashore, in those circumstances, had apparently become tedious.

Mary Powell left New York at 8 A.M. on 6 April 1872 and, steaming leisurely, arrived at Rondout at 1:30 P.M. to undergo spring painting. On 6 May she went up the creek to the Delaware & Hudson Canal Co.'s Island Dock, coaled up and left at 10 A.M. for New York to take aboard some new carpets and furniture. On the 11th, she commenced her regular season from Pier 39, N.R., at Vestry Street. Captain Anderson was back in business.

Even the dignity of that stellar steamboat captain was not sufficient to make him immune from a 'joke.' The question became, 'Why is the *Mary Powell* preferred by persons in a hurry?' The answer was, 'Because her captain is *a lander soon!*' Of course you didn't get that one. You had to be told, 'A lander soon—A. L. Anderson! See?'

The captain's clerk was again his son Jansen, who now used the title of

27 Ferdinand Frost went back on *Mary Powell* when she came out in 1869 and remained in command during the three years of the Van Santvoord operation, 1869-71.
Incidentally, *Armenia* was put on the route for the closing trips of the 1870 season.

28 One passenger, not quite overcome by all this elegance, was annoyed by the rattling of the window sashes in the saloon and suggested the installation of rubber fittings as a remedy.

29 Change in ownership shown on enrollment of 1 July 1872, with A. L. Anderson, sole owner.—The National Archives.

second captain. The elder Anderson felt safe in leaving the steamboat in his hands, as he did, for example, that summer, when he took himself off to vacation at Fire Island.

On 29 November 1872, *Mary Powell* was towed to New York by *Ansonia* of the New York and Saugerties line to have work done which Captain Anderson considered necessary. Naturally, this included the removal of the addition to the main saloon and the restoration of that apartment to its original size. The added weight had probably lain as heavily on Captain Anderson as it had on the boat, and he asserted that he '. . . wouldn't carry all that stuff if it were covered with pure gold.'[30] Fine as the 'Van Santvoord saloon' was, it had to go and go it did—solid walnut and all. For his public, Captain Anderson explained that this large saloon had shut in the most pleasant part of the boat from which to enjoy the scenery and the air. Whether they wanted it or not, the passengers were again to get considerably more of both.

When *Mary Powell* came out in 1874, another son of the captain's, Absalom Eltinge Anderson, was aboard as steward. Born 11 January 1856, he had received advanced education at a military institute and at Eastman's Business College in Poughkeepsie. Then only eighteen and overshadowed by brother Jansen, he was destined to command *Mary Powell* almost twice as long as his renowned father.

His father, at that particular period, was nurturing a desire to rebuild his steamboat extensively and in the fall of 1874 decided that the time had come. *Mary Powell* made her last trip on 5 October, was stripped of furniture and loose equipment and on 8 October went down the river with invited guests aboard. Logically, Mr. Allison's yard at Jersey City had been selected for the thorough overhaul.

Her engine was completely dismantled and for seven weeks, until past mid-December, she was in dry dock while the hull was rebuilt.

The hogframe was lengthened and strengthened; the spars were arranged differently and an additional one was stepped to make four aft, equidistant apart. New keelsons, 80 feet long and from 4 to 7 feet thick, were installed and a new gallows frame put in. The engine, when replaced, stood higher than previously, thus decreasing the dip of the wheels. With the cylinder diameter increased from 62 to 72 inches, and with a new piston rod, links, crosshead and slides, the engine was so completely rebuilt that Fletcher, Harrison & Co. altered the date of construction to 1875.

Other changes included the removal of the fan lights on the after deck

[30] From an article on *Mary Powell* in *The Kingston Daily Freeman*, 22 November 1919.

over the dining room and the changing of the entrance to the barroom, now in the hold, to the extreme forward deck.

Even the pilothouse was new.

Before the work was completed, the original estimate of cost at from $25-30,000 seems to have been doubled. Since only two years before new boilers had been fitted, the result of this exhaustive overhaul was in effect a new steamboat. One of the few things Captain Anderson omitted was lengthening, but that alteration has been connected with the rebuilding of 1874-75 so often that it is now generally cited as an unquestioned fact.[31]

The boilers put aboard in 1873 had, of course, been designed when the cylinder diameter was 62 inches, but were continued in use with the 72-inch cylinder until the fall of 1880. Then, although not outworn, they were removed at Rondout to be replaced the following spring with a larger pair.

Since this would naturally result in an increase in weight, Captain Anderson planned to have considerable work done between the seasons of 1880-81 to decrease the weight of his steamboat in order to offset the heavier boilers. If possible, he hoped to have in 1881 a lighter *Mary Powell* than he had in 1880. That he felt could be accomplished by the removal of all of the heavy, oak timbers in the frame of the hull and the replacement of them with light, sturdy, seasoned butternut. Since August, 1880, he had had agents all over the country buying the best butternut timber for him and had built up a stockpile at Rondout. This was loaded on *Mary Powell* and on 17 November she was towed to Ward, Stanton & Co.'s yard at Newburgh, where the work was to be done.

[31] The plan for a major rebuilding of *Mary Powell* in 1874-75 and the work itself were covered in detail in the press, which also carried descriptions of the boat immediately afterwards. In the many such items which the writer has seen, there is no mention of or even a hint of lengthening. That would have been the most important part of the project—far more important that the many other alterations which were fully covered. Within a few years, however, a lengthening commenced to be connected with it.

The story seems to have had its birth as a result of the installation of the larger cylinder. This connoted an increase in the size of the boat and was sometimes said to have been necessary because of an increase in the weight, which again implied lengthening. Actually, any added weight came from general changes made during the course of the overhaul.

Bolstering the lengthening theory was the additional spar that was added aft. This, to those not thoroughly familiar with *Mary Powell*, strongly suggested greater length.

For good reason, there seems to have been no attempt on the part of those associated with the boat to correct the tale of the 1874-75 lengthening, because it was excellent publicity. A lengthened steamboat conveyed to the traveling public a more distinct impression of an improved steamboat than did a largely rebuilt steamboat. Also, lengthening indicated heavy business on the line and emphasized its prosperity.

By the 1890's the story was well enshrined in print and has been carried along with considerable consistency since then.

The writer feels that the fact that *Mary Powell* was lengthened only once, in the fall of 1862, is proven conclusively by the information presented in footnote 21.

The rebuilding of the hull in 1874-75 had been done on Allison's sectional dry dock and a sectional dock in those days was not the best place on which to rebuild a hull. There was always the possibility that one or more sections might take to leaking slightly and, by settling, throw the hull out of line.[32] In fact, during that rebuilding, while the planking was off the hull, the shipyard men had been afraid to remove frame timbers which needed replacing and had, instead, fitted new timbers alongside the defective ones. All of this useless weight would now be removed, too.

After an unsuccessful attempt had been made on 19 November, *Mary Powell* was hauled out on Ward, Stanton & Co.'s enlarged marine railway on 27 November and the hull work, including a recoppering of the bottom, continued throughout the winter. She was relaunched on 9 April and towed immediately back to Rondout for the installation of the new boilers and the completion of other work.

Amongst the many varied additional projects accomplished between the seasons were the altering of the hogframe; the installation of arch frames on each side between the ceiling and planking from bow to stern; the renewal of the guards; the enlarging of the paddle wheels to maintain the dip; the moving farther aft and rebuilding of the staircase from the quarterdeck to the main saloon; and the recarpeting of the main and ladies' saloon.

The dining room and barroom in the hold were entirely rebuilt, with yellow pine flooring stained with dragon's blood and shellacked. In place of the large dining table, small tables seating about four people each were installed.

Topside, the pilothouse was enlarged and the forward hurricane deck strengthened, so that in 1881 that part of it was for the first time opened to the public.[33]

The cost of all of the work done was said to have been about $50,000.

On 12 May 1882, Jansen H. Anderson died at the age of thirty-eight, leaving a widow and five children. His passing was a severe emotional blow to his father, who was then nearing seventy, and very soon after the season commenced rumors were about that Captain Anderson once more planned to sell *Mary Powell*. Approached early in June as to the truth of a report that a Poughkeepsie resident had attempted to open negotiations for the boat, he replied that the public was arriving at an erroneous as-

[32] Captain Anderson later claimed that this had actually happened and that the hull had been slightly twisted. This made necessary the installation of extra knees and other braces.

[33] As safety equipment at this time, *Mary Powell* carried 1,200 life preservers, 3 metallic lifeboats, 6 life rafts and 2 inflated pontoons. In addition, the doors were hung so that they could easily be removed from the hinges and thrown overboard.

sumption and that he had no desire to sell *Powell*. Asked then if he had received an offer from a Rondout steamboat owner, the captain replied,

'Well—I don't care to answer that question. A certain party did make me an offer, but it was low so that I would not entertain it for a moment. I don't want to state what was the price that was offered me or the name of the person that made the proposition.' [34]

Mary Powell made her last trip for the 1882 season on 23 October and received the customary salutes all along the river. The season had been a successful one and the longest in years.

The following day she laid up for the winter, but broke out her colors at half-mast to honor an old friend of Captain Anderson's who had died. In truth, she might have been mourning Captain Anderson himself, for on the day before he had completed his last trip in command. He and the 'certain party' eventually reached satisfactory terms and *Mary Powell* once again passed into the hands of Thomas Cornell.[35]

Captain A. L. Anderson had now retired permanently. In 1883, he purchased a home near Santa Barbara, California, where he died on 18 November 1895.

When *Mary Powell* came out in 1883, another fixture amongst the crew was gone, too. Pilot Guernsey B. Betts and Pilot Hiram G. Briggs of Romer & Tremper's Rondout and New York night boat *James W. Baldwin* had exchanged positions.[36] Captain William H. Cornell, a cousin of Major Cornell's who had been clerk on *Mary Powell* during the earlier Cornell ownership and captain of the Cornell night boat *Thomas Cornell* when she was lost on Danskammer Point in 1882, was in command. The purser was A. Eltinge Anderson.

Thomas Cornell operated *Mary Powell* this time for only one season. In March of 1884, Captain John H. Brinckerhoff of Poughkeepsie bought his interest and was joined in the transaction by Captain I. C. Wickes and A. Eltinge Anderson. Captain Cornell had apparently acquired a small share in *Mary Powell* from Thomas Cornell and he retained this. After all transfers were completed, Captain Brinckerhoff owned approximately one half of the steamboat; Captain Wickes, one quarter; and Captain Cornell and Mr. Anderson, the remainder. During the spring of 1884, these gentlemen organized the Mary Powell Steamboat Co., capitalized

[34] *The Kingston Daily Freeman*, 9 June 1882.

[35] Change in ownership shown on enrollment of 29 January 1883, with Thomas Cornell as sole owner.—The National Archives.

[36] Mr. Betts remained on *James W. Baldwin* for the remainder of his career. He died on 26 March 1892, one day after his 61st birthday.
Mr. Briggs' term of service as pilot on *Mary Powell* proved to be even longer than that of Mr. Betts.

at $150,000, and for that year elected Captain Wickes, president; Captain Cornell, vice president; Mr. Anderson, secretary; and Captain Brinckerhoff, treasurer.[37] Captain Cornell remained in command of *Mary Powell* and Mr. Anderson continued as purser.

Late in 1885, A. E. Anderson purchased Captain Cornell's stock and in 1886 became captain of the steamboat, carrying on after the manner of his father.[38] Like Captain Absalom, Captain Eltinge showed never failing courtesy to and solicitude for his passengers and built up amongst them a large following. His first trip in command with passengers was on 21 May 1886, on the excursion of his alma mater, Eastman College, from Poughkeepsie to New York. Regular service commenced the following day.

Between the seasons of 1886-87, considerable repair work was done at Newburgh by T. S. Marvel & Co. and James H. Case,[39] including the complete rebuilding of the wheelhouses, which were enlarged to give an increased clearance of about 15 inches. The following fall, *Mary Powell* again wintered at Newburgh for the accomplishment of major alterations to her interior and joiner work by Mr. Case.

To provide greater space on the quarterdeck for passengers waiting to disembark and boarding, the staircase to the saloon was moved forward forty feet and two baggage rooms located in that area were torn out.

The ladies' saloon on the main deck aft was rebuilt into a dining room, with trimmings of mahogany, olive and whitewood and with a frescoed and decorated ceiling. The windows were sufficiently low so that the passengers could enjoy the scenery while seated for their meals and were interspaced with panels of hammered brass and silver. Beneath these metal panels and the windows ran a natural wood wainscoting. From the dining room, a doorway seven feet in width lead to the main deck and was flanked by large mirrors.

The entrance to the old dining room in the hold was converted into a cloak and baggage room.

The main saloon, formerly 65 feet in length, was extended about 35 feet. The after end was rounded out and the forward end partially rounded. Trimmings in the saloon were also of mahogany, olive and white-

[37] Change in ownership to the Mary Powell Steamboat Co. was not shown by enrollment until 12 May 1885.—The National Archives.

Before *Mary Powell* came out in 1884, davits were for the first time installed for the lifeboats.

[38] After Wm. H. Cornell left the company, *Mary Powell* was again enrolled on 23 February 1886, with A. Eltinge Anderson, secretary of the Mary Powell Steamboat Co., listed as managing owner in place of W. H. Cornell. No further changes in connection with ownership were made by enrollments.—The National Archives.

[39] James H. Case had learned the trade of ship joining from Wm. H. Webb, to whom he had been apprenticed, and worked on *Mary Powell* as an independent ship-joining contractor.

wood. The panels that had alternated with the windows were removed so that on either side there was now a long succession of French plate-glass drop windows, with but a few inches of woodwork between them. Above each window was a clerestory pane of cathedral glass, many of which were hand-decorated. Since the engine-room housing was now within the saloon, plate-glass windows were built into it, to enable the passengers to watch the operation of the engine without going to the main deck.

To compensate for the removal of the ladies' saloon, a ladies' reception room or lounge was built off the starboard side of the saloon, just aft of the wheelhouse, and a ladies' toilet room was added in a similar position on the port side.

The after hurricane deck was opened to the public, with a staircase on the promenade deck aft leading to it. On the forward promenade deck, ahead of the saloon, a private parlor was built and was available for rent.

In addition to all this, 100 electric lights were installed. For some time afterwards, *Mary Powell* was referred to as the 'new' *Mary Powell*.

The 'new' *Mary Powell* was shortly to lose an old friend. Her mate, Daniel Hoffman Bishop, in failing health, was forced to go ashore during the summer of 1890 and died at the residence of a sister at New Hamburg on 5 September. The funeral was held on Sunday, 7 September, and *Mary Powell* was available for those many friends of Mr. Bishop's who wished to attend.

With her flags at half-mast and her pilothouse draped in mourning, she left Rondout at 1 P.M. and touched at Poughkeepsie on her way down. When she arrived at New Hamburg, all went ashore to pay their last respects to the deceased, who was laid out in the mate's uniform of which he had always been extremely proud. After the services had been concluded, *Mary Powell*'s bell commenced a steady tolling and the march to the steamboat began, headed by the Negro waiters bearing the many and varied floral tributes. Next came representatives of the Brotherhood of Pilots and Engineers; the officers of *Mary Powell*; other members of the crew; the deckhands, bearing the casket; and then the relatives and friends.[40]

The casket was placed on the main deck and at Poughkeepsie transferred to a waiting hearse, which carried it on to the Poughkeepsie Rural Cemetery. The last of *Mary Powell*'s original officers to remain active aboard her had gone ashore forever.

The nineties brought further changes to the steamboat herself. In the spring of 1894, two new private observation parlors were added, one ahead of the wheelhouse on the promenade deck on either side. They

[40] Amongst those present was Mr. Bishop's old shipmate, Guernsey B. Betts.

were fitted with three plate-glass windows, shaded by awnings, and equipped with incandescent lamps.

In the fall of 1896, she was taken to the New Jersey Dry Dock Co.'s yard at Elizabethport, New Jersey, where her hull was renewed and the bottom recoppered. During the winter, considerable renovating of the interior was done. Some $50,000 was said to have been spent on this overhaul.

On 2 December 1901, Captain John H. Brinckerhoff, who held 715 of the 1,500 shares in the Mary Powell Steamboat Co., died. Shortly thereafter, the newly formed Central-Hudson Steamboat Co. approached Captains Anderson and Wickes, who together held the controlling shares in the Mary Powell Steamboat Co., with an invitation to submit a selling price for their stock. Although both gentlemen agreed upon a figure, nothing came of it.

But before another year had passed, Captains Anderson and Wickes did sell. The buyer was the Hudson River Day Line, of which Eben Erskine Olcott was then president and to which the bulk of their stock was transferred on 6 October 1902.[41] When the annual meeting of the Mary Powell Steamboat Co. was held on 31 December 1902 in J. Sleight & Son's store in Sleightsburgh, New York, Mr. Olcott was elected president of that company, too. Captain Anderson, who had retained one share of stock, was elected general manager and remained in command of *Mary Powell*.

Although now under the control of the Hudson River Day Line, the Mary Powell Steamboat Co. continued as a separate organization and owned *Mary Powell* to the end of her life.[42]

During the winter lay up, 1902-03, she had her promenade deck extended to the bow to increase her capacity by about 200.

In 1903, she made spring excursions to Albany on 15 and 16 May, and on 18 May commenced making daily round trips between New York and Poughkeepsie until *New York* and *Albany* of the Hudson River Day Line

[41] At this time, Captain Anderson owned 420 shares, of which he retained one. Captain Wickes owned 360, of which he retained one until 29 November 1902, when it was transferred to Talcott C. Van Santvoord. On 20 December 1901, Captain Wickes had transferred five of his shares to Joseph W. Hatch. Four of these were transferred to the Hudson River Day Line on 6 October 1902 and the remaining one to E. E. Olcott on 22 October.—From *Stock-Book of Mary Powell Steamboat Co.*, 1899 and ff., in the New-York Historical Society.

[42] In 1903, the executors of Captain Brinckerhoff's estate sold his 715 shares at auction in Poughkeepsie to a representative of New York State's Governor Benjamin B. Odell, Jr. Odell, who was associated with the Central-Hudson Steamboat Co., later became for a time a director of the Mary Powell Steamboat Co. Eventually the Hudson River Day Line acquired his stock, too, the transfer being made on 30 April 1906.

According to a note attached to the stock book, the Hudson River Day Line considered the cost of gaining complete control of the Mary Powell Steamboat Co. to be $103,500, as ff.: $25,000 for the Brinckerhoff stock, which was approximately the price for which Odell had bought it; $42,000 for the Anderson stock at par; $36,500 for the Wickes stock at par.

began their regular season between New York and Albany. *Mary Powell* then opened her own regular season on 29 May.

In October, she went to the Townsend & Downey Shipbuilding & Repair Co.'s yard at Shooters Island, where from $30-40,000 worth of work was done to her. New boilers, smokestacks and paddle wheels were installed, and parts of the engine were renewed. On the main deck, in that part of her outboard deckhouse extending from ahead of the wheels to aft of the boilers, portholes were placed about three feet apart in an attempt to modernize her appearance. When she was painted, the stacks were coated in a near yellow hue to conform with those of the Hudson River Day Line, which had adopted light paint for smokestacks in 1890. The gallows frame was repainted to match the stacks and the walking beam was brightened with aluminum paint.

In 1904, *Mary Powell* again was used between New York and Poughkeepsie until *New York* and *Albany* came out, and then went back on her regular run. She had been covering that run for over forty years and a few good years still remained ahead.

To be continued

Notes on the Cross-Staff

BY M. V. BREWINGTON

IF the traditional genealogy of devices for taking celestial altitudes is to be trusted, the cross-staff was the third instrument to be used at sea.[1] Known variously as a forestaff, cross-staff, Jacob's staff, gradstok, martalet, arbalestrille, etc., it appears to have been first mentioned about 1342 by a Catalonian Jew, Levi ben Gerson.[2] A block print dated 1502 once in the Staatsbibliothek at Bamberg seems to give the first printed description of the staff, illustrating its use in both horizontal and vertical measurement.[3] The instrument was introduced to seamen by Martin Behaim in the late fifteenth century, but there is no evidence it was known to even such advanced navigators as Columbus and Magellan, both of whom mention only its forerunners, the plane quadrant and astrolabe.[4] When navigation manuals began to be printed about 1545 directions for the use of the staff appeared regularly until the 1780's, long after more accurate and better adapted instruments for sea use had been developed.[5]

Of all altitude-measuring instruments the cross-staff is the rarest today. Only one complete undamaged original is known, and unless others exist in Scandanavian, Iberian, or private collections, a total of ten in various states of completeness and restoration have come down to us. The perfect instrument is owned by the Scheepvaart Museum at Amsterdam. That institution also owns original parts of three others, one staff and two sets of crosses. What may be a complete instrument, but certainly a badly damaged one, is owned by the Rijksmuseum. The Prins Hendrik Museum, Rotterdam, and the Science Museum, London, hold staves with

[1] J. B. Hewson, *A History of the Practice of Navigation* (Glasgow, 1951), p. 71 ff.

[2] Lloyd A. Brown, *The Story of Maps* (Boston, 1949), p. 184.

[3] Photostat in the John Carter Brown Library. The Staatsbibliothek reports the original cannot be found.

[4] Samuel Eliot Morison, *Admiral of the Ocean Sea* (Boston, 1942), I, 241, 257-258, n. 9. Morison states the cross-staff is mentioned by Joao de Lisboa in *Tratado da Marinharia, c.* 1515-1525.

[5] See Pedro de Medina, *Arte de Navegar* (Valladolid, 1545) and Andrew Wakeley, *The Mariner's Compass Rectified* . . . (London, 1784).

reproduced crosses. The Peabody Museum of Salem has just acquired an original staff. The Musée de la Marine, Paris, has an original staff with two original crosses (this could be a complete instrument—it was examined in a poorly lighted storage room with no opportunity to check the crosses with the scales). And the National Maritime Museum, Greenwich, has a complete ivory instrument but it obviously was never intended for actual use at sea.

The instruments by inscription or pedigree are:

Rijksmuseum—*Inscription:* CLAES ANDRIESSON GOUTUN [Found in the Barentz Cache in Novaya Zemlya, thereby dating the instrument prior to 1596 (Plate 23)].

Science Museum—*Inscription:* Harmon a St Malo 1687.

Musée de la Marine—*Inscription:* I V K 1720 [Perhaps made by one of the Van Keulen family of Amsterdam (Plate 24)].

Peabody Museum of Salem—*Inscription:* 1748 [Found on Long Island, New York, in 1952 (Plate 24)].

Scheepvaart Museum—*Inscriptions, Instrument A:* HULST VAN KEULEN 1701;

Instruments B & C: [Two unmarked sets of crosses from the Van Keulen shop];

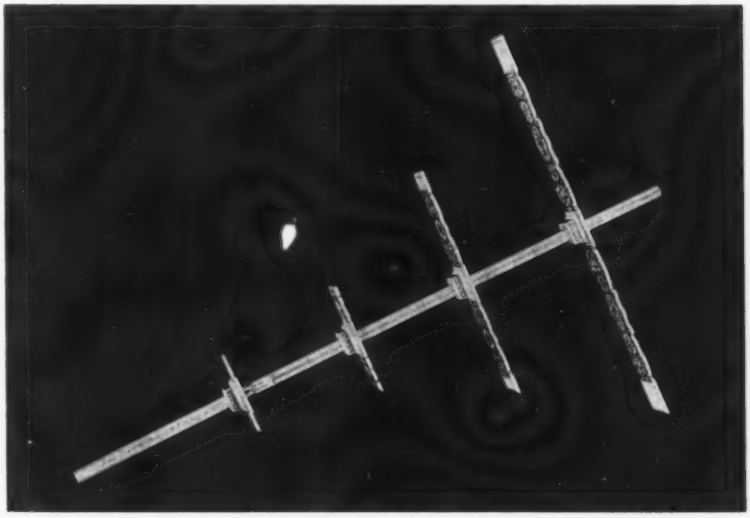
Instrument D: H. NOORDYK 1805 [Found at the Harlingen School of Navigation (Plate 23)].

National Maritime Museum—*Inscription:* Thomas Tuttell Charng X London fecit [*c.* 1700 (Plate 23)].

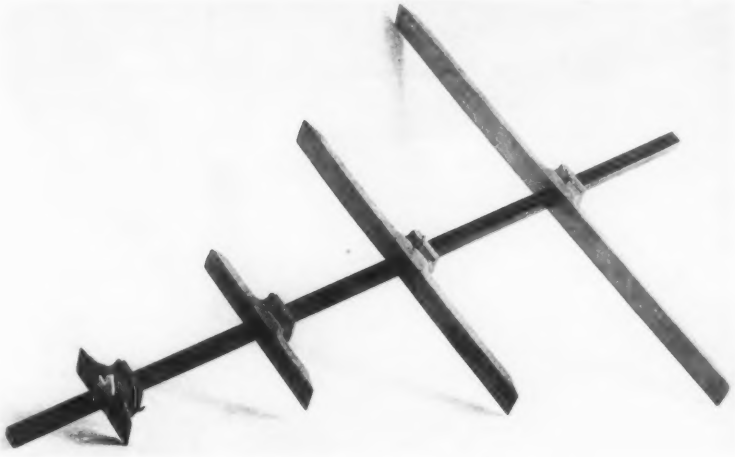
As far as the practical staves are concerned all save one are identical in design and material. They are of ebony, approximately 5/8 x 5/8 inch section and in length from 30 to 36 inches. Graduations with slight variations in the angles included are found on each side. Evidently the earliest cross-staves were not graduated but after an altitude was taken the angle was laid down on paper and measured with some form of protractor.[6] The original crosses are of some light-colored wood such as box or pear, are alike in shape, and have brass wing screws for locking the position on the staff. The exception is the Rijksmuseum staff. Its damaged condition makes the shape of one end and the length indeterminable. It is made of palisander wood and graduated on only two sides. The long cross differs in shape, is of ash, and has no set screws; the short cross, also of ash, generally follows the shape of the crosses of the other instruments.

[6] Brown, op. cit., p. 184.

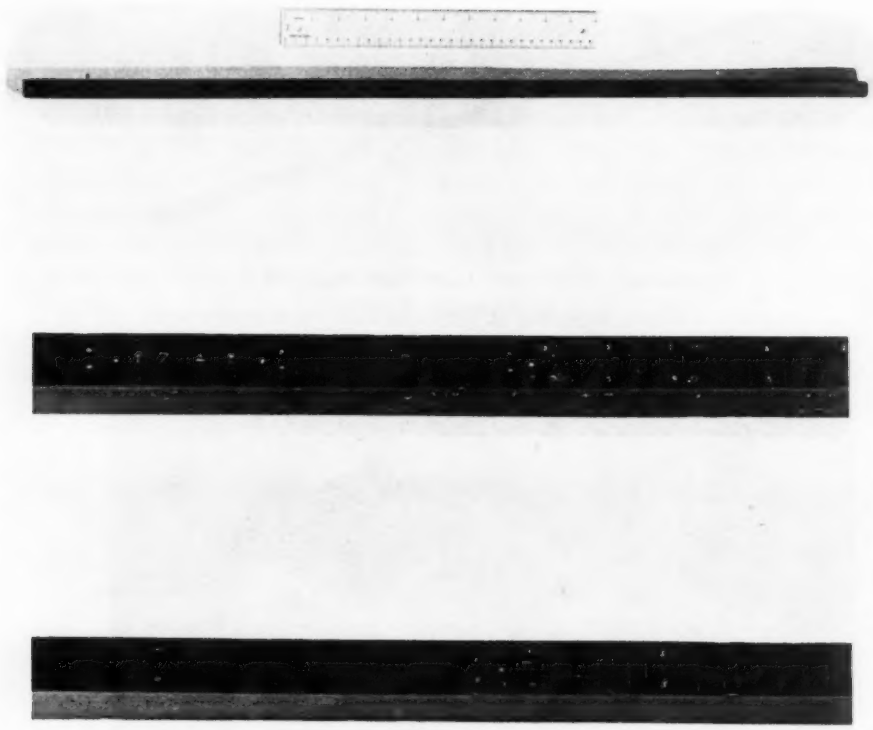
Cross-staff, circa 1596, from Barentz Cache
Courtesy of Rijksmuseum, Amsterdam



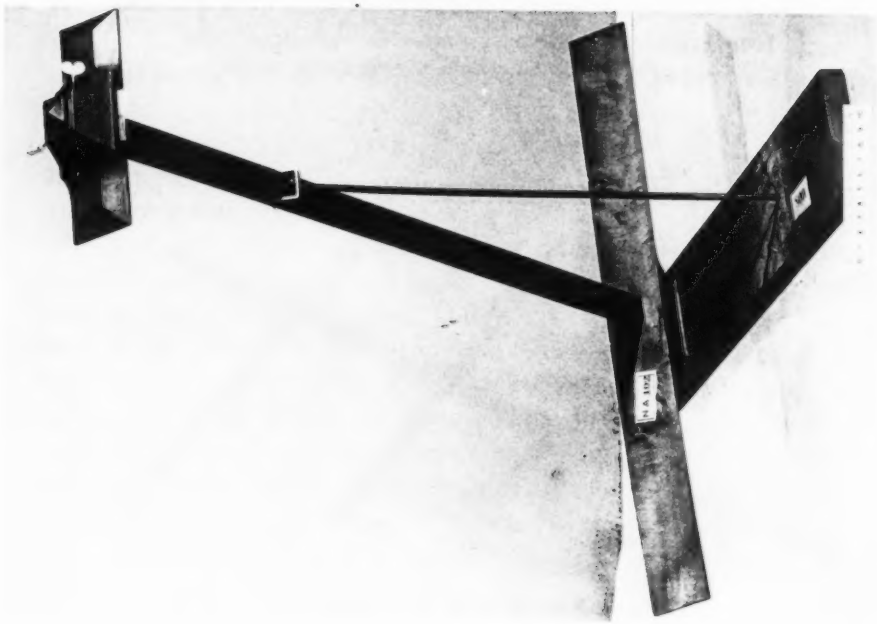
Ivory cross-staff made by Thomas Tuttell, circa 1700
Courtesy of National Maritime Museum, Greenwich



Cross-staff made by H. Noordyk, 1805
Courtesy of Ned. Hist. Scheepvaart Museum, Amsterdam



Staff, dated 1748, found on Long Island, N. Y.
Courtesy of Peabody Museum of Salem



Cross-staff, circa 1720
Courtesy of Musee de Marine, Paris

The common use of the cross-staff is too well known to need much description. The observer faced the celestial object with the 90° end of the staff at his eye, slid the appropriate cross (crosses and staff sides are numbered 1, 2, 3, 4, or by the highest angle included, 90°, 60°, 30°, 10°) back and forth until the line of sight across the upper edge touched the object at the same instant the line of sight saw the horizon on the lower edge. The angle was read on the staff at the point where it entered the cross. Readings to 20′ or 30′ and guess were the best with many errors inherent and others likely.[7]

The most important error of course was the inability of the eye to focus on both ends of the cross at the same instant. The correction of that had to await the invention of the Hadley quadrant. The next possible error lay in the accurate placement of the staff to the eye. Three methods were developed: the Dutch, in which the staff was placed beside the nose at the inner corner of the eye; the English, in which the outer corner of the eye at the temple bone was used; and the French, wherein the staff end was placed on the bone below the eyeball.[8] Edward Wright pointed out the need of care in placing the staff and noted that a large error could easily occur.[9] What may be an effort to prevent the error is found on the Barents staff—a small circle with its center point is engraved on the eye end of the staff with an allowance for the distance from the orbital bone to the eyeball. On some instruments a positive check on the correct position of the staff at the eye could be had by placing the 60° cross at 30° on its proper side; putting the staff to the eye and moving it about until the ends of the crosses aligned: that is the correct spot to hold the staff when taking an altitude.[10]

No eye could take the full splendor of the sun and make an accurate observation, and as Cortes remarked, the cross-staff '. . . serveth not . . . for the sun, except . . . under a thin cloud' and Captain John Smith advised the use of the cross-staff only for star sights with an astrolabe for taking the sun's altitude.[11] The best one could do was to observe the upper limb of the sun shading the eye with cross, then deduct the semi-diameter, another chance for error. By 1600 a red glass was used next to the eye and John Seller suggested, 'It would . . . be better to have the glass fitted

[7] The clearest description of the common cross-staff is to be found in Wakeley, op. cit., 1758 edition, pp. 149-151, 153-158.

[8] Charles de la Ronciere, *Histoire de la Marine Francaise* (Paris, 1914), II, 524.

[9] Edward Wright, *Certain Errors in Navigation Detected and Corrected* (London, 1599).

[10] M. Bion, *The Construction and Principal Uses of Mathematical Instruments*, translated by Edmund Stone (London, 1723), p. 204.

[11] Martin Cortes, *Breve Compendio* . . . (Seville, 1551), quote by Hewson, op. cit., p. 74.

in a piece of brass, and so put upon the end of any of the crosses . . . .'[12] As accurately ground glass and a positive fix of a screen to the cross was just about impossible, vicarious errors were introduced. None of these screens or their frames have been preserved.

The real solution for glare came apparently early in the seventeenth century—a method of using the cross-staff for taking backsights. John Davis had made public his design of the backstaff or Davis quadrant in 1594 and probably the backsight use of the cross-staff came shortly thereafter.[13] The earliest use I have found is in Charles Saltonstall, *The navigator* . . . , but since he gives no details other than '. . . contrive it [the cross-staff] to observe with the shadow, turning your backe to the Sunne, as you doe with your Back Staffe' the method must have been fairly well known.[14] The contrivance was a very short cross with a projecting ivory or bone plate with an edge or point aligning with the center of the staff. This short cross was placed to the eye end, flat side in, and the appropriate long cross fastened flush with the other end, flat side out. The observer turned his back to the sun and manipulated the short cross and the staff until the shadow of the sun thrown by the upper end of the cross touched the point or edge of the ivory plate at the same instant the horizon was seen at the lower edge of the long cross and the plate edge or point. Eventually to aid the eye's work at the lower end a brass peep vane was fitted to the cross and at the upper end a lens concentrating a beam of light rather than a shadow with umbra and penumbra.[15] Another improvement, made of wood or brass akin in shape to the horizon vane of the Davis quadrant, was a fitting called the 'Dutch Shoe' used in place of the short cross with the ivory point.

While the instruments usually described in navigation and instrument makers' manuals were for use in measuring angles up to 90°, special cross-staves were made for special uses. Ordinarily the staff for accuracy's sake and to keep it within a reasonable length was graduated for only one portion of the quadrant on each side and in conjunction with that side required a specific cross. For instance the Peabody staff is graduated on side one from 90° to 38°; on side two from 90° to 26°; on side three from 60° to 13°; and on side four from 30° to 8°. But the Barents staff seemingly was intended for the higher latitudes only since one side marked 'DIT IS DIE

[12] John Seller, *Practical Navigation* (London, 1694), quote by Hewson, op. cit., p. 74.

[13] John Davis, *The Seaman's Secrets* (London, 1607).

[14] Charles Saltonstall, *The navigator* . . . (London, 1636), p. 121. Photostat at The Mariner's Museum. The backsight is not mentioned by Sturmy, Blundeville, or Gunter.

[15] Wakeley, op. cit., pp. 152-153.

SON SYDE' (This is the sun side) covers the angle from the upper 30's to 90°, and the second side, inscribed 'DIT IS DIE NOERSTERS SIIDE' (This is the North Star side) includes the same scale with the other two sides blank. And Samuel Sturmy gave directions for graduating '. . . Al maner of the Sea Crosse starres' [*sic*] some '. . . serving for divers South Starres' actually took their declination into account.[16]

To many the late date 1805 of one staff in the Scheepvaart Museum, over three centuries after the invention of the Davis quadrant and almost a century after that of Hadley's, is surprising. The adaptation of the back-sight to the instrument and its low cost helped keep it in the hands of some navigators. Not all of them were European since one is included in a Salem inventory of 1780 and a New York instrument maker, William Hinton, advertised that he '. . . makes and sells all sorts of Mathematical Instruments . . . viz. Hadley's Quadrants, Davis's do. Crostaf's, Nocturnals, Gunter's Scales, Plottin do. hanging and common Wood Compasses, three Foot telescopes. . . .'[17] The really surprising thing is that with the hundreds of Hadley quadrants and the dozens of Davis quadrants in our maritime museums so few cross-staves have been preserved.

[16] Lucas Janssz Waghenaer, *The Mariner's Mirrour* (London, 1588).
[17] *New York Gazette and Weekly Mercury* (4 May 1772).

Since the founding of THE AMERICAN NEPTUNE *Marion V. Brewington has been one of the most active members of the editorial board and a frequent contributor to its pages. He lives in Cambridge, Maryland, on the eastern shore of Chesapeake Bay. His authoritative book,* Chesapeake Bay: A Pictorial Maritime History *was published last autumn.*

Loss of the Steamship Independence

BY CAPTAIN JASON COLLINS

With an Introduction by John Richards

CAPTAIN Jason Collins, who tells the tragic story of the wreck and burning of the steamer *Independence,* was born in Gardiner, Maine, in 1817. He went to sea as a boy, serving on six sailing vessels, including the ship *Powhatan,* in which he made a voyage to Liverpool, before turning up as fireman in 1836 on the steamer *New England,*[1] which was lost in 1838, after colliding with the schooner *Curlew* off Boone Island. He served continuously on successive Kennebec steamers, working up to be chief engineer of *Huntress.*[2]

In 1850 he was engaged by Commodore Vanderbilt as chief engineer of the new steamer *Independence.*[3] He superintended the setting up of her machinery in New York, and sailed on her 13 January 1851, for San Francisco by way of the Strait of Magellan. *Independence* reached her destination in July, having been detained for a month in Rio because of yellow fever. From then on she carried passengers between Nicaragua and San Francisco, the first steamer to do so. This passage of 3,000 miles was generally made in from twelve to fifteen days. She had run on this route with no accident until her destruction off Margarita Island in 1853 with great loss of life.

After this disaster, Collins returned to New York by way of the Nicaragua route and then to Gardiner, where he again was engineer on several steamers. In 1861 he was made captain of *Eastern Queen,*[4] 'a palatial steamer for her day,' which was twice chartered as a transport during the Civil War for the Burnside and Banks expeditions. *Eastern Queen* was succeed-

1 *New England,* side-wheel steamer; 261 tons; built at New York, 1833. An ill-fated vessel whose boiler exploded 9 October 1833 while on the Connecticut River en route from Hartford to New York. She was repaired and put on the Boston to Maine run. On 31 May 1838 she was rammed by schooner *Curlew* off Boone Island and sank with the loss of one life.

2 *Huntress,* side-wheel steamer; 333 tons; 172 feet x 23 feet; beam engine with a 36-inch cylinder and 12-foot stroke; built in New York, 1838.

3 *Independence,* side-wheel steamer; 613 tons; 211 feet x 27 feet x 10 feet; built in New York, 1850, by William H. Brown.

4 *Eastern Queen,* side-wheel steamer; 700 tons; 220 feet x 29 feet; vertical beam engine with a 48-inch cylinder and 11-foot stroke; built in New York, 1857, by John Englis. A transport in the Civil War.

ed in 1865 by *Star of the East*[5] with Collins in command of the latter. In 1889 when the Kennebec Company was running two steamers, he was transferred to the new *Kennebec*,[6] partly of his design, remaining her master till his retirement in 1903. He was thus captain of our river steamers on the Boston-Gardiner route for forty-two years. During this time, to quote an old friend who loved statistics, 'he has carried at least 1,700,000 passengers, and has sailed his steamers over one million miles, without a single loss of life. . . . no wonder that his passengers trusted him implicitly, for his very presence seemed a guarantee of safety.'

On 27 November 1898, that guarantee was proved well founded, for Collins had the wisdom to turn his *Kennebec* back, while *Portland* went on to her doom. I talked a few years ago with an old man who was a deck hand on *Kennebec* that day, and who remembered vividly how the crew of the ingoing *Kennebec* waved to the outgoing *Portland*.

I remember Captain Collins well, a tall stately figure by the pilothouse, with his white beard. There was a faraway, weather-beaten look to his eyes. He was a man revered by his crews and in our town. But I wish I had the happy recollection of him that a friend of mine has. Once as a tot he was on *Kennebec* with his father and mother. He recalls how the old captain took him on his knee and told him a story—how the old *Kennebec* was lost in the fog—how during the fog, the foghorns grew louder and more numerous, the sea rougher and rougher—how finally the old *Kennebec* anchored. Then the fog blew away, and the old *Kennebec* was sitting in a cow pasture, surrounded by mooing cows!

Jason Collins died in 1907, aged ninety years and six months.

Particulars of the loss of the Steamship *Independence*, February 16th, 1853, on the S.W. point of Margareta Island, Lower California Mexican Coast. On the morning of the 16th of Feb. between the hours of five and six o'clock, I was waked by the steamer striking on reef just off Margareta Island. I instantly went on deck, and started for the engine room, as I was leaving my room, which was on the upper deck, I heard Capt. Sampson calling me by name, to back the engine, the engine being stopped. I went below to the engine room, as soon as I could, where my first asst. Mr. Boston, who was on watch at the time, was in the act of backing, as I went in to the engine room. I told Mr. Boston to look after the fires, and took hold of the working bar and worked the engine back, for about two minutes strong, and the ship went off. As soon as the ship was off the Gong was struck, to stop and go ahead. While I was in the engine room working the engine, my 2nd asst Mr. Standly, came to the engine room. I sent him at once to see if the ship was making water, and if she was to connect the

[5] *Star of the East*, side-wheel steamer; 1,413 tons; 244 feet x 35 feet x 12 feet; built at New York, 1866, by John Englis for the Kennebec Steamboat Company. She was renamed *Sagadahoc* and later *Greenport*.

[6] *Kennebec*, side-wheel steamer; 1,652 tons; 256 feet x 37 feet; vertical beam engine with 60-inch cylinder and 11-foot stroke; built at Bath, Maine, 1889.

port bilge pump (which was disconnected), and turn on the bilge injection. At this time one of the firemen came to the engine room, and reported water coming in to the fireroom very fast. Mr Boston came at the same time, reported blower channels full of water, and blower useless. I now left Mr Boston in charge of the engine, and reported to the Captain who was on the starboard paddle box, that the ship was making water very fast, and the water would soon be up to the fires in the furnaces. As I left to go below the order was given hard to port. When I got below I found the water in the fireroom about fifteen inches deep, and not rising very fast, or not as fast as when I went on deck, owing to the coal giving away which was piled up in bunkers. As we could not use the blower on account of water in blower channels, I ordered 2nd asst eng'r to get all the steam possible, told him to pass bags of coal from the kitchen, which was soft and free burning, and from forward bunkers, from the top where dry. Knowing the ship was headed for the Island, and no chance for getting on shore, as the Island at this place was almost perpendicular, I informed Capt Sampson, that he could select a better place to beach the ship. The ship at this time was quite near the rocks, and a fearful place for a landing, in the surf that was on the shore. The order was at once given to hard-starboard, and the steamer slowly swung off. Capt Sampson now gave me orders to notify him, or give him five minutes notice, before the water would be up to the fires, and keep the engine running as fast as possible. I went below again, and found the water gaining faster, and the coal that we could now get was so wet it was of no use. I now ordered my men to pass berth slats from the State Rooms to the fireroom. I now told Mr Standly to stop in the fireroom and watch the water, and report the rise so I could report to Capt Sampson, in order for him to get as good a place as possible to beach the ship. The water was gaining fast and everything was being done to keep up steam that could be, but the steam was getting low, and the water in the ship, we were going slow.

I now went on deck again, and reported to Capt Sampson the state of things below. He told me as before, give him five minutes notice. I went below again, and found the water near the bottom of grates. I immediately went on deck again, and notified the Captain that he had only his five minutes. The ship was nearly abreast a sandy beach, and quite near. The order was given hard to port, and the ship swung slowly towards the beach, and in a very few minutes grounded very easily as she was going very slow when she took the bottom. As soon as grounded Capt Sampson told me to work the engine ahead as long as I could, in order to work the ship on to the beach, as there was a heavy surf. I was standing on the upper deck over the engine room and passed the word to Mr Boston 1st Asst. who was in the engine room to work the engine ahead, and he did so. I now noticed smoke coming from fireroom Ventil. door. I went to the hatch over the fireroom, where I could see flames coming out of furnace doors, into the fireroom. I went below immediately, when I found my asst eng'r and some four or five firemen at work putting water on the wood work. I now ordered a part of them below to keep the parts most exposed well wet down as there was plenty of water, it being knee deep, and keep the furnace doors closed as much as possible. As the ladder to fireroom went down directly in front of the furnaces, the men could not go down, on account of the flames and hot coal from the furnaces, and were obliged to go forward steerage, and go through a hatch, which had been cut to let air in to the fireroom, and did as told. I now went to my room and got two axes which I kept under my mattress, one I gave

to my first ass't to cut through the deck over the fireroom, or front of boilers in order to get water down over the front of boilers; the other ax I gave to Capt Sampson. In a few minutes the hole was cut through the deck, and we then commenced throwing water. All of this time the flames were coming out of the furnaces fearfully. The men in the fireroom were in the water to their waists, and doing all they could. At this time nothing had taken fire but what had been extinguished. I had with me my asst eng'rs some five or six men, Purser Freeborn, 2nd Officer and a few others, all at work with me. All of the time which had elapsed since the ship had grounded, the passengers had been leaving the ship. The Purser had asked me about the fire in the furnace, and I told him it would soon be out, and at the same time told my men to do their best, while I went on deck for a moment. When I got on deck I found the flames coming up around the steam chimneys, which were on the after end of the boilers (the boilers being dropflue). My 3rd asst eng'r, and one fireman, was using water from the deck tub to put out the fire around the chimneys. I now put them on to the pump which was quite near, with one joint of hose. On this being done for a few minutes, I was satisfied that it was useless to do more, as the flames were bursting out from the kitchen, engine room, dead lights fore and aft, and spreading rapidly throughout the ship. All had been done that could be about putting out fire. I now went forward, and helped throw overboard anything and everything that would assist in saving those that were struggling for life in the water alongside, anything that would assist them to get on shore, steerage tables, seats, hatches, forward room doors, assisted Capt Sampson and Purser Freeborn to get fore and topsail yards overboard, they usually being on deck when bound up the coast. At this time the ship was completely enveloped in flames fore and aft except the forward part of spar deck. The passengers had about all left the ship with the exception of a very few. After getting what there was that would assist in saving life, Mr Freeborn had gone over the side and swum ashore. As I could not swim, I had told my men some time before to save themselves, and they had all jumped over the side about the same time. After Mr Freeborn had gone there were left forward Capt Sampson who was hanging over the bow, one coal passer, over the side, and myself, hanging to the fore chains with a short line. Capt Sampson when forward was calling to his first Officer to come off with boat and save passengers; at this time there was probably 100 people on the beach, and as many more struggling for life, while another 125 were drowned, and two boats on the beach, and no one making any effort to get a boat off, (these two boats were lowered as soon as the ship grounded with hawsers, but were capsized in the heavy surf, and had remained on shore, with their crews, as spectators). As I could not swim I got down and held on to the end of the fore yard which was alongside. I had a small piece of board and thought I would try and get on shore, the consequence was it did not amount to anything. When I tried it, I sounded and when I came to the surface I was in reach of the yard and got hold of it again. I had hold of the end of the yard, and had a very safe place as it took but a little to hold me up but the yard was rolling round and many were clinging to it, and in the heavy surf many were loosing their hold, and drowning, from the suction when the vessel would rise and form a suction and many lost their lives. I thought I should be safer on board the ship, and I now caught hold of my rope which was hanging over the side made fast to the chain plate. I went on deck again thinking there might possibly be some way to escape, but the fire was now forward and very hot. I went over the

side again, and down to the end of the spar again, and tried to swim again, but with no better success than before, and to hang on to the spar I did not think safe, for there were twenty persons on it, or holding on it, as bad off as myself. I now thought I would go on deck and see if I could get forward over the bow and wait for chances. When I got partly up the side I heard my name called saying to remain where I was and he would assist me. I looked shoreward and see one of my coal passers, (James Sawyer) swimming toward the ship with a life jacket on for me. I now got down to the spar again, he (Sawyer) assisting me to put the jacket on. I now started for the shore with Sawyer in company he keeping off those that were in the water many of them nearly drowning, and many of them never getting on shore alive. I finally arrived on shore safe. I was some tired, and not able to do much until after going up on the sun side of the mountain and warming myself in the sun. In looking seaward, what a sight! The ship completely enveloped in flames, on the beach some two hundred people many in the water, and some drowned ones on the shore, still others floating off seaward on coops and what they could get that would hold them from sinking, spars, etc. and hundreds crying for help. At this time the sight was terrible. Two boats was manned and was picking those up that were between the ship and shore that were not drowned, one of the boats took off the coal passer that was near the bow over the side. After all had been saved that could be between the ship and shore Capt Sampson and the steward Mr Henen with others went outside and picked up all that could be found, as many had jumped overboard on the seaward-side, and floated off shore, some were on coops and other things, the coops had all been thrown overboard, half on each side, some four on each side, by the time all had been picked up, there had been some thirty bodies come on shore. It was about 9 o'clock A.M. We now carried some spars up ravine near by and laid them acrost, and put a sail over them which made a shelter tent for the ladies and children, this took till about 11 o'clock A.M. The next in order was assistance for this Island was an uninhabited Island, without water, or food, some thirty miles long, four or five wide, and some twelve miles from the main land. All our dependence for food was possibly from the wreck, as the Island is nothing but a volcanic born Island. Captain Sampson knowing that whale ships frequented the Bay inside this Island, the entrance being some thirty miles to the northern end, started in one of the steamer's boats, with a vounteer crew of Maine men (passengers) for assistance. About the time Capt Sampson got off, some of the passengers had crossed partly over the Island, or to the highest part where they could see the Bay between the Island and main land, and reported nothing in sight. This caused much anxiety among the passengers. At about 2 P.M. I started with Mr Henen the steward for the east side of the Island, distance about five miles. When we reached the high part of the Island which was some three miles, we discovered four whale ships, about one half way from the Island to the main land, probably ten miles distant in the Bay. We returned and reported the discovery, which allayed the fears of the passengers very much. It now being dark, the dead all buried that had come on shore, the ship had burned to the water's edge and was laying broadside on to the shore, the heavy surf had hove her quite near the shore, it was now about seven o'clock P.M. The Mate and 1st and 2nd asst Eng'rs had got a boat alongside, and succeeded in getting some Beef and Pork, (salted) some canned meats, fruit etc., and set a guard over what had been out, built fires and layed down on the sand for the night.

Feb. 17th. Every one was up as soon as daylight, there had some ten or twelve bodies come on shore during the night, which were buried as well as it was possible to do, as the sand was very shallow, and the bodies much swollen. The ship was yet on fire but nearer the beach. We now got on board and got out about 10 Barrels of Salt Beef and Pork, some preserves and vegetables, but no water, most of the people had something to eat this morning, but no drink, and nothing to be found except vinegar and molasses, of which we got two barrels of each. The forenoon passed and the passengers were hunting for water and none found. Capt Sampson not returned, every body thirsty, we thought it about time to do something to allay the thirst if possible. Accordingly with the assistance of three or four passengers, I found a piece of lead pipe, and got one of the large coppers from the kitchen range, and a small wooden tank for a condenser, which we set up just at the water edge, fitted top to the boiler, and connected one end of the lead to the top of the boiler, and run the pipe through the tank, and scuttled the top of the tank and filled with water from the sea, and fired up under our boiler, as the water boiled away, filled through a hole in the top of the cover of the boiler and plugged up again. After a while found another boiler, and connected the two with a lead pipe, and still a third boiler, to heat water in, so to not lose time in supplying the boilers that were making steam. By seven o'clock this Eve were making water at the rate of one and a half gallon per hour. I now had plenty of assistance, who insisted on running the condenser through the night. I finally consented to be released. Being tired I gave up my charge, and turned in on the sand, for the night. My clothing consisted of pants, shirt, one shoe, and a piece of canvas, in place of one shoe, the night cold, with heavy dew.

18th, out at 4 o'clock, and found I had some 10 Galls of water, and many of the passengers had drunk a little during the night. This A.M. got another boiler and made a top to it, and with a short piece of lead pipe made another connection, and increased our water supply considerable more. Last night the Mate, my 1st and 2nd asst. Eng'r, with some four men, with a small saviner or about 4 inch bore gun, crossed the Island, and in sight of the ships which had been seen two days before, built a fire at night to attract the attention of the ships, and early this morning fired the gun. Some of the boats were in the bay, and not far from the shore of the Island, and pulled in near the shore, and after being satisfied, that our people were shipwreck people, the whalemen landed. While this was being done, Mr Freeborn with about fifty passengers, had carried one of the ship's boats acrost the Island, to the east side of the Island, and soon the news was got to the ships by signals and by other means, and by 12 o'clock noon boats from the ships, with bread and water were crossing the Island, and by 3 o'clock P.M. all had bread and water, and commenced moving acrost the Island. Capt Sampson not having arrived we all left for the whale ships, with the exception of the Mates of the *Independence*, and one of the Mates of one of the whale ships, and a few sailors belonging to the whale ships, all of the passengers and crew had crossed the Island and by 10 o'clock this Eve were safely on board of the whale ships.

Feb. 19th. Capt Sampson arrived off the Island, at about 2 o'clock this A.M, in Sch'r. Capt Emery. The surf being too heavy to land through and passengers away, he sailed round to the eastern side of the Island and got on board of one of the ships this morning.

Feb. 20th. This A.M. manned boats from whale ships with volunteers for the Is-

land, crossed the Island, covered the bodies where the sand had blown off, (the sand was very shallow where the bodies were buried) then cut up canvas we had used for shelter for the ladies and children while on the beach, and used it to cover packages of Beef and Pork saved from the wreck, which made a package train of about forty people, and arrived back at about 10 o'clock in the evening.

21st. Started again this morning with about fifty passengers and crew of the wrecked steamer, crossed the Island, and when we arrived covered up the bodies where the sand had blown off, picked up provisions, (beef and pork) tin cans, and in fact every thing that would be of any use on ship while on passage to Sanfrancisco, arrived back on board of the ship *Meteor*[7] at about 10 o'clock this eve.

22nd. Went to the Island as usual, gathered up everything that would be of any use, and got back to the whale ship at about 10 o'clock this eve.

Feb. 23d. This morning with eight of my men, with an Officer and some of the crews of the whale ships, and two boats, with 30 water casks in tow, for water 18 miles distant where we arrived at about 10 o'clock, this Eve. We now sunk wells, (some two or three) bored holes in the head of casks, and put them in to the wells, one head being cut, set watch to look after the water as it came in, and fill the water in to casks.

Feb. 24th. Filling water all day, when night came, got in to a small inclosure where a fire had been during the day, (the inclosure was about 6 ft square) the sand warm and we were quite comfortable during the night, the only annoyance was the barking of Kyotes, which were very plenty.

Feb. 25th. This A.M. towed the water out of the bayou into the Bay, and left the water with one boat and crew. Arrived on board of the ship *Omega,*[8] where I had made my home since the wreck, at about 2 o'clock P.M. The reason for leaving the water with one boat, was because the ship that we were going to Sanfrancisco, would pass within a few miles of where we left the water, and save towing.

The 26, 27 and 28th, I stopped on board of the Ship *Omega,* the most of the time. The place where we got our water was up a bayou, or a creek, some two miles from the Bay, and nothing but white sand as far as you could see, and drifted like snow. Our wells were dug about four of five rods from the salt water, and filtered through the sand, and very good, for a few days.

On the morning of March 1st, the passengers and crew belonging to the *Independence* left the Ship *Omega,* James Murry and B Clements, and went on board of the Ship *Meteor,* which had been chartered by Capt Sampson, to take us to Sanfrancisco, with the exception of about 30 who would go to the Sandwich Islands in the three remaining Ships, which were bound there. At 12 M. this day the *Meteor* was under way, it fell calm, and we anchored.

March 2d. Got underway in the afternoon, got about 5 miles and was obliged to anchor again.

March 3d. Got underway this A.M. and got out of the Bay, and to sea at about 6 o'clock this Eve.

March 4th. Fine weather and smooth sea, made but little distance today. Or-

[7] Probably *Meteor,* ship of Mystic, Conn.; 325 tons; master, Jeffery. Whaling voyage to the North Pacific 8 November 1851 to 23 March 1856; one of the 'Stone Fleet.'

[8] Probably *Omega,* ship of Fairhaven; 305 tons; master, Fisher. Whaling voyage to North Pacific 12 October 1851 to 22 March 1854.

ganized in messes of ten in a mess, and the try works for cooking, one man in each mess, for Capt of mess.

March 5th. Fine weather with smooth sea, very light winds, made but little distance this day.

March 6th. Fine weather, light wind and smooth sea, made nothing today.

March 7th. Fine weather, light winds and smooth sea, made but little distance today.

March 9th. Light winds and smooth sea, made but little today.

March 10th. Fine weather, light winds and smooth sea, made but little distance today.

March 11th. Commences with light N.N. West. Wind, with smooth sea. Weather fine.

March 12th. Commences with fresh N.N.W. Wind, with rough sea, distance run 120 miles.

March 13th. Strong N.N.W. Wind, with rough sea.

March 14th. Commences with light N.N.W. Wind, and smooth sea, made nothing today.

March 15th. Commences with light winds, 12 M. strong N.W. gale, ends with strong N.W. gale and rough sea, ship under double reefed topsails, and courses, distance run this day 95 miles.

March 16th. Strong N.W. gale and rough sea. Ship under single reefed topsails and courses, standing to the west, distance made this day 250 miles.

March 17th. Strong N.W. gale and rough sea, squally during the afternoon and evening.

March 18th. Strong N.W. gale and rough sea, squally occasionally, ship under single reefed topsails and courses, and main topgallant sail.

March 19th. Strong N.W. Wind with rough sea, with an occasional squall, ship under single reefed topsails, courses and main topgallant sail.

March 20th. Strong N.N.E. wind with rough sea, with occasional squalls. Ship under single reefed topsails and courses and main topgallant sail.

March 21st. Commences with light E.N.E. wind and rough sea, ends with light E.S.E. and smooth sea.

March 22d. This day commences with light E.S.E. wind and smooth sea, ends the same, made but little distance this day.

March 23. Commences with fresh N.N.W. gale and rough sea, ends the same. Ship under single reefed topsails and courses.

March 24th. This day commences with fresh N.N.E. winds and rough sea, ends with light N.N.E. wind and heavy sea, standing to the west.

March 25th. Commences with winds and heavy sea, all of first part of the day, ends with light S.E. winds with heavy rolling sea.

March 26th. Commences with fresh S.E. gale and smooth sea, ends with strong S.E. gale and rough sea. Ship under double reefed topsails and courses.

March 27th. Commences with strong S.E. gale and rough sea, at 12 M. abating, made sail, this P.M. at 2 o'clock made land to the N.W. of Sanfrancisco, ends calm, with thick fog, and heavy ground swell.

March 28th. This day commences with strong S.E. gale and rough sea. Ship under double reefed topsails, standing off and on. Thick fog all day.

At 2 o'clock this P.M. Mrs. Taylor, one of the passengers died. She was injured when wrecked.

March 29th. Commenced with strong S.E. gale and rough sea, all of the first part of the day. Ship under double reefed topsails, at 4 o'clock P.M. made the Faralones Islands, day ends moderate, with stand off and on during the night.

March 30th. Commences with light S.E. winds, which continued all day, with smooth sea, and strong northerly current, made nothing this day. As there is only one day after today, before the mails leave for the East, and the survivors of the wrecked crew and passengers are now nearly six weeks overdue, and no prospects of the ship reaching Sanfrancisco in season to report the loss of the *Independence,* by the mail of April 1st, Captain Sampson left the ship this morning in one of the ship's boats for Sanfrancisco with letters, where he will probably arrive this Eve.

March 31st. Commences clear and fine, wind fresh N.W. Ship off Faralones Islands, the wind light after 10 o'clock. I got permission to take one of the ship's boats (as the wind had died out) with crew to put in to Sanfrancisco, got in on the bar, the Ebb tide was so strong we could make no headway, in the meantime a breeze had sprung up and the ship was coming in, and came up with us, dropped astern and boarded the ship again, and arrived at Sanfrancisco, at 3 o'clock in the afternoon, went on shore, got letters from home, announcing all well, got cleaned up and went to boarding house.

April 1st. Got off my whaleman's suit, and got some clothes, of which I was much in need, and seeing some of my friends off, for New York, via Panama, and on the Stmr *Nevada,* from the first of April to the 10th were in Sanfrancisco, the 10th I went to Stockton, on the Steam. *Sophia,* returned on the morning of the 12th. I now remained in Sanfrancisco, until the 16th, when I went on board of the Stmr *Brother Jonathan,*[9] left the wharf at 5 P.M., left the wharf, and anchored at 6.30 Eve on account of thick fog, where we lay for the night. April 17th sailed for 'San Wan Del Sud,' at 8 o'clock A.M., with strong S.E. gale and rough sea.

April 18th commences with strong S.E. gale and rough sea.

April 19th commences with fine weather, smooth sea with light N.W. wind.

April 20th fine weather, smooth sea, and making good progress.

April 21st, fine weather, smooth sea, with strong N.W. wind.

April 22, commences fine and smooth, with fresh N.W. wind.

April 23. This day commences with light N.W. wind and smooth sea.

Sunday April 24th, light variable winds and smooth sea.

April 25th, light variable winds and smooth sea. This P.M. spoke steamers, *Cortes,*[10] of the Nickeragua line, and Mail Steamer *Panama,*[11] of the Panama line for Sanfrancisco.

[9] *Brother Jonathan,* side-wheel steamer; 1,395 tons; 220 feet x 36 feet x 13 feet; built at Williamsburg, N. Y., 1850. New York to Panama run, 1850-1852; San Francisco to Panama run, 1852-1856; coastwise service after 1856. Struck on a rock off St. Georges Point, California, 30 July 1865 and sank in 45 minutes.

[10] *Cortes,* side-wheel steamer; 1,117 tons; 220 feet x 22 feet x 16 feet; built at New York, 1852. California to Central America run, 1852-1862. Sold to Shanghai 1861 and burned there in 1865.

[11] *Panama,* side-wheel steamer; 1,087 tons; 200 feet x 33 feet x 20 feet; built in New York, 1848, by William Webb. San Francisco to Panama run, 1849 to 1861. In 1868 she was armed and presented to the Mexican government for use as a revenue vessel. Her name was changed to *Juarez.*

April 26th. Calm with smooth sea, and very hot.

April 27th, calm with smooth sea, very hot.

April 28th, calm with smooth sea, and hot.

April 29th commences calm and hot. Arrived at San-Wan-Del-Sud, this afternoon, went on shore with my party, Fred Kimball, B Eastman, and Closky, who has been with me since leaving New York, who the owner put in my charge, the boy has no Parents, and has been in my department as an Oiler.

April 30th. After breakfast at the house where we stopped, at about 8 o'clock I mounted my Mule, with my baggage, and provisions in my saddle-bag, consisting of my whaleman's pants, with the legs tied at the bottom, and filled with provisions, and something to drink, all of which I got on board of the steamer before going on shore. My Mule was very mulish, and occasionally would go into the woods, in spite of all I could do, and when I had got the twelve miles to the Lake, I was some lame from working my passage. We arrived at Virgin Bay at 11 o'clock in the afternoon, after an hour waiting in the hot sun went on board of the Steamer *Omatapa*, named for a mountain in Lake Nickaragua (volcanic). During the afternoon, the passengers and baggage had been all got on board, and at 10 o'clock this Eve. with about 1000 persons on board, got underway for Fort St. Carlos, and Castella Rapids.

May 1st, crossing Lake Nickaragua, and arrived at Fort San Carlos in forenoon. Was transferred to a smaller steamer that took us to Castella Rapids. When we arrived at the Rapids, our baggage was put on to some cars, and taken below the Rapids, the passengers walked, the distance probably about one fourth of a mile. Here is a public house where we dined, and here were two small light draught stern wheel boats. This afternoon took the steamer down 12 miles to another Rapids, got on shore and walked below the Rapids, to another boat, where the baggage was transferred, where we stop for the night, and a tough place, nothing to eat or drink.

May 2d. This morning started for San Wan del Norte. The river seems to grow more shallow. I was put in charge of a boat, with quite a number of passengers, in order to lighten the steamer, and started down the river. Occasionally we would get on a sand bar, and all hands would get out and get the boat over, get on board and on again. There was a number of boats working down, the same as myself. The only advantage I had by having charge of the boat, I did not get out when on a sand bar. We arrived at Graytown at about eight o'clock this evening, tired and hungry, and put up at the St Charles Hotel. We expected to have gone on board of the Ship for New York, but as their passengers were on board, the passengers for New York could not go on board, so we had to stop at Graytown, some three miles across the Bay from where the Ships lay, the *Prometheus*[12] and *Daniel Webster*,[13] the *Prometheus* for New York and the *Daniel Webster* for New Orleans.

May 3d. This morning fine and warm, all hands in fine condition, and having a jolly good time on shore. This Eve at eight o'clock, signal gun from one of the steamers to go on board of our ships, arrived on board of the *Prometheus* at 9 o'clock.

May 4th. Underway this morning at 6 o'clock for New York, steamed out of the bay, and to sea again. Weather very fine.

[12] *Prometheus*, side-wheel steamer; 1,207 tons; 230 feet x 33 feet x 20 feet; built at New York, 1850, by Jeremiah Simonson. New York to Nicaragua run, 1850 to 1854.

[13] *Daniel Webster*, side-wheel steamer; 1,207 tons; 223 feet x 31 feet x 18 feet; built in New York, 1851, by William H. Brown. New Orleans to Panama run, 1851-1859; transport during Civil War. Lost off Cape Carnaveral, Fla., 3 October 1866.

May 5th. Commences very fine, hot, with smooth sea.

May 6th. Fine weather, warm, light airs and smooth sea.

May 7th. Very fine weather and smooth sea. Passed Cape Antonio at 2 o'clock this afternoon, and was off the Moro Castle at 9.15 this Eve.

Sunday April (May) 8th. Commences fine and clear, with smooth sea, in afternoon fair wind, all sail set, and going along finely.

May 9th. Commences clear and fine, smooth sea, fair wind all sail set, distance run this day, 324 miles. We are in the Florida Stream.

May 10th. Smooth sea and fair wind all this day, distance run, 290 miles.

May 11th. This day commences clear and cool, with sea and fair wind, distance run this day, 284 miles.

May 12th. Clear, cool and fine. Arrived at New York this morning at 8 o'clock, bid good day to my companions, and bought myself some needed clothing, and left New York for Boston on the Steamer *Bay State*, via Newport and Fall River, at 5 o'clock this Eve.

May 13th. Arrived at Boston this A.M. 6.45, and went directly to the Steamer *Ocean*, where I met my Brother Wesley, and many of my friends, and learned that my family were all well at home. Sailed for Gardiner this evening at 7 o'clock on the Stm. *Ocean*,[14] Capt. Donovan.

May 14th. Arrived at Gardiner this morning at 8.30, and was soon on shore where I met two of my sisters, Frances and Martha, and was soon at Mr F. B s with my wife and daughter Anna.

[14] Steamer *Ocean* burned after collision with the steamer *Canada* in 1854.

John Richards, a graduate of Harvard in the class of 1907, taught English at St. Paul's School, Concord, New Hampshire, from 1912 to 1949, when he retired. During his last seven years at the school he was head of the English Department. He now lives in his native Gardiner, Maine, where among other pursuits, he is a student of Kennebec River history.

Lobster Fishing on the Maine Coast Past and Present

BY DOHN A. CLUFF

THE lobster fishing industry here on the Maine coast, as elsewhere in New England, can well be called representative of the few industries in which the oldest methods are employed, side by side with the new.

With the man who rows his dory or skiff to fish his string of traps goes the earliest methods; but a few hundred yards distant will undoubtedly be one of the latest powerboats, capable of quick getaway and high speed. The modern lobsterman employs the latest of electronic devices, one of which is the depth indicator, enabling him to tell in a matter of moments whether or not he is over a suitable depth. This is a far cry, nowadays, from the time when a hand lead was all to be had. Now a man can set his traps without guesswork and be sure of the grounds he is on.

As with all of our natural resources, the lobster is now the object of conservation. Once so plentiful that in some localities the lobsters were used for fertilizer and in other places many could be picked up along the shore at low tide, they are now subject to regulations governing their size, and the female, when carrying eggs, must be returned to the water. A now obscure slang definition of the word lobster meant, at the turn of the century, 'an awkward or worthless person.' The word 'awkward' may still be descriptive, but to define the lobster as 'worthless' is certainly a misstatement. But this does illustrate in one way their comparative value to today's catch that retails usually at a half dollar and better per pound. The estimated value for the 1952 catch in Maine was in the neighborhood of nine million dollars, or half the value of the total Maine fish landings for the year.

It is hoped the sketches accompanying this article will give the reader a better insight into the manner in which the lobsterman makes his catch. Every conceivable type of hand-propelled craft has been used and is still, and the variations in the powerboats are many; so the drawings do not intend or pretend to cover lobster fishing craft completely but merely to

show the most representative types used down through the years.

Trap building has changed greatly through the years. Old engravings I have seen depicted traps much longer than those of today, built half round and providing access at both ends. Double-ended traps were not satisfactory due to the lobsters' working out of the lower end when the

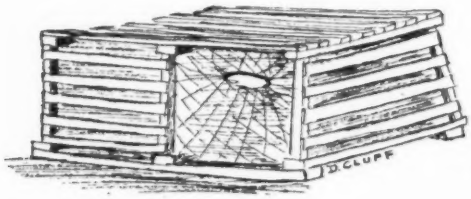


Figure 1

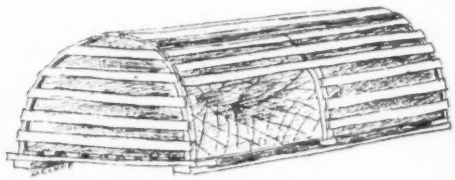


Figure 2

trap was brought to the surface. Also, the old-style traps appear fragile compared to the traps today, although this may not have been so. Present-day traps are constructed of live oak, fastened with galvanized nails, and are of two basic types; the oblong trap shown in Figure 1 and the half round which is the trap shown in Figure 2. The half-round trap may be predominant at one place, but a few miles distant, the oblong trap will be more in favor; whether one greatly outnumbers the other is diffi-

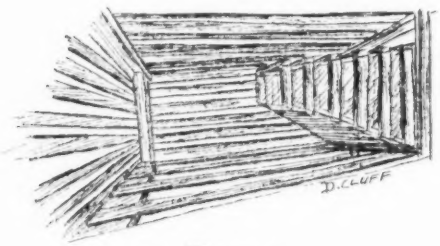


Figure 3

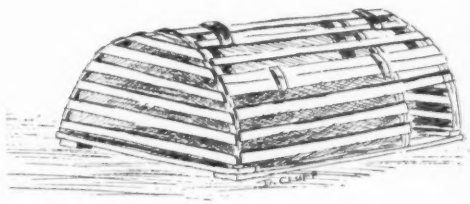


Figure 4

cult to say. Definite construction characteristics are apparent, however, in both styles. Each employs a knitted twine pothead, with a large ring as its center on either side at one end, directly opposite each other. This consumes better than one third of the trap itself and is called the entrance. Variations in the half rounds may have but one pothead, either at one end or on one side only. Inside of this, opening toward the opposite end of the trap is an incline entering into the 'parlor' and this incline or parlor head may be knitted of twine as is the outside arrangement, or it may be built of trap stock. The latter is shown in Figure 3. Proper at-

tention here determines the success of the trap. This incline must be so constructed to enable the lobster to enter easily, yet the end of the in-

Figure 5

cline must be high enough from the bottom of the trap so that the lobster cannot reach it with his tail, for it is in reverse that this creature works out of the trap. A few bricks secured to the bottom of the trap serves to

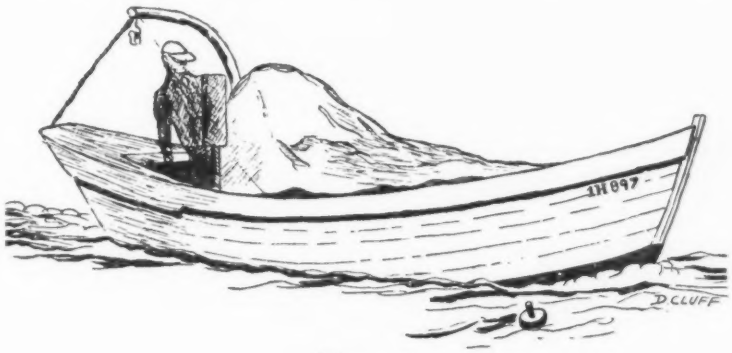


Figure 6

weight it down and to overcome its buoyancy to a certain extent. The only great difference in trap construction that I have ever come across is pictured in Figure 4, and this trap is a half round, but with an en-

trance so narrow that a pothead could not possibly have been employed. One of the advantages the flat trap has in its favor is that it is better suited for carrying and stacking. Another, it is claimed, is that this type of trap will not travel along the bottom to the extent that the half round will, because of the corners that may cause it to wedge against some obstacle. This, of course, refers to normal conditions at sea; neither trap style can withstand a fall gale if they are set close to shore.

The era of the old-time lobsterman is nearly over, and the man that fishes his string of traps today from a dory is generally doing so 'on the

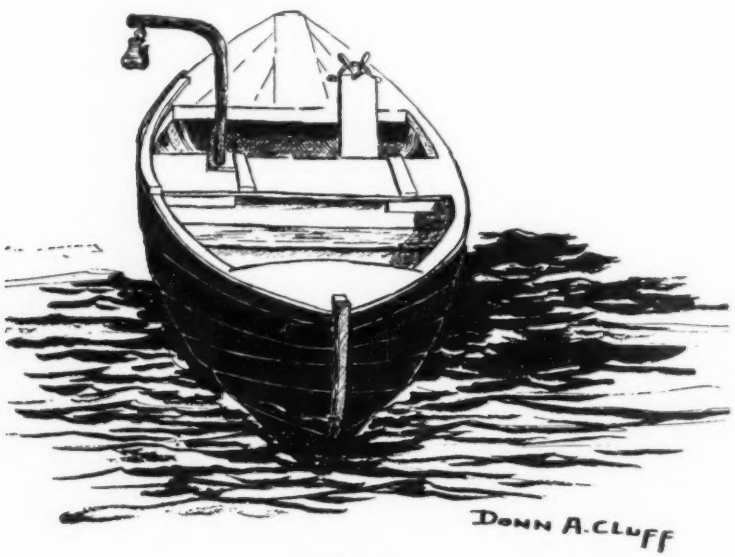


Figure 7

side'; that is, in addition to some other regular occupation. In Figure 5 you will see a man ready to boat his trap. With the pot marker in the boat, he has hauled in his warp (line from the float to the trap that is about ten fathoms in length when fishing inshore), bringing the trap to the surface and he is now ready to slide the trap across the gunwale, which is, at this point, nearly to the water. A slip of the foot now, or a cranky boat, would most certainly put him overboard. As lobstermen work fully clothed and generally wear boots, this is not a pleasant prospect, regardless of swimming ability.

Small sloops were employed in the lobster fishery years ago, but hauling traps was difficult and rowing these craft, which was necessary to do when among the set of traps, was indeed a chore.

Figures 6 and 7 depict powerboats that are now becoming less common along our coast. They are both of dory construction and were very serviceable. The craft shown in Figure 7 could perhaps be called the prototype of the modern work boat, and in Figure 8 you will see the cockpit of the type of boat that is now an everyday sight the length of our coast. The modern lobster work boat is generally without ornamen-

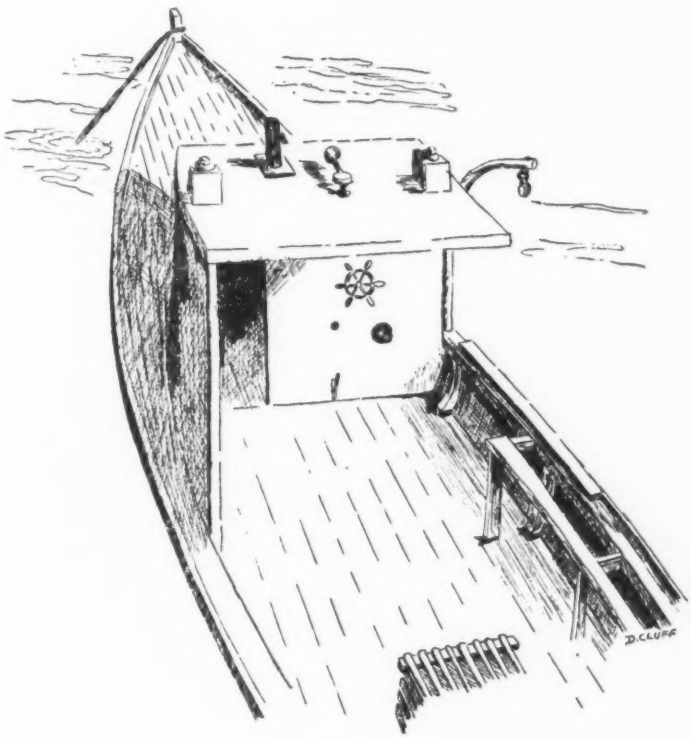


Figure 8

tation; the cockpit is clear, with the power plant forward of the bulkhead that carries the few controls. The snatch block is on the starboard side. This is an open-ended block so constructed that it allows the line attached to the float to be placed upon the sheave without reeving. This is in line with the pot hauler, visible on the bulkhead. A windbreak is set up on the port side to shelter the fisherman, as the starboard side is, with very few exceptions, the working side and to leeward. And you can be sure that whenever you see a striker's pulpit jutting off the bow that the owner keeps an eye open for tuna during the summer months. Sun-

days are usually tuna days, when the whole day is spent searching for what the old-timers call 'hoss mackerel.'

While the method of catching the lobster has really not changed a great deal, even though the craft used in this fishery have been developed to a greater efficiency, neither compare to what has happened to the trim lobster smack that once delivered Maine lobsters to the cities south of us. Where wind once filled sails, we now have a large truck hurrying along the well-known U. S. No. 1 highway and the lobsters reach Boston and New York in a matter of hours, rather than days.

Dohn A. Cluff, a navy veteran of World War II, lives at Sanford and Ogunquit, Maine. He is a member of the Maine Historical Society, is interested in maritime history, and goes lobstering.

Notes

Edmund Fanning and Henry Eckford

A connection between Edmund Fanning,[1] early South Pacific explorer and navigator, and Henry Eckford,[2] New York shipwright, is described in the *Memorial to the 26th Congress* of Edmund Fanning (1840). This includes a narrative set in 'the Southern winter of 1800,' of how 'having lost the schooner-tender ... by the mechanical labor of his ship's crew ... in less than 60 days (snow falling on two-thirds of these days) ... we launched from the berg a firm and strong-built little vessel of upward of 30 tons ... of a newly invented build ... for, having on board my ship [*Aspasia*] several tons of bar-iron, our little vessel's deck was therefore not framed in the usual way ... but with iron clamps and braces ... having an excellent workman, a complete master of his business as our armorer ... we thus had—a little vessel, built out of the most singular scraped-up materials ever used; ... which performed to admiration as a firstrate, quick-sailing dry-sea-boat and never was caused to spring a leak by any pressure of the ice.' He describes the 'thumps, nips, jams etc.' which she withstood so beautifully and (a note) 'She carried on deck a cedar-built whaleboat, safe from harm, through all the heavy gales ... which forced her to lay to under her storm sails for several hours at a time, in heavy breaking seas.'

Her launching was also—'as new an invention as her building ... viz: a groove way smoothly cut out of the iceberg from her keel blocks down to the water's edge ... with a smaller one to suit the keel ... she slid down like a boy downhill on his sled.' The officers of an English elephant oil ship had made merry when this 'shallop' was in the building; but Fanning sold her, before returning to New York—'to an English captain for 120 guineas ... who very goodnaturedly remarked ... "Yankee enterprise and perseverance must ever stand pre-eminent." ' In *Aspasia*'s crew no man was over twenty-eight years old.

After *Aspasia*'s safe return in 1802, Fanning was offered by President Jeferson the command of either of the new U.S. frigates, *Adams* or *New York*. He evidently preferred the merchant service; and in his *Memorial* continues: 'On submitting this, our casual new-invented manner of build to Mr. Henry Eckford ... his great mechanical talent made certain improvements ... so as in the construction of a ship, to clamp (as we call it) her deck frames and chainbrace her body-frame, etc. etc.' He ends a long technical description with: 'The extra expense (except calking her frame and double planking her bottom) in building a ship of 350 tons (the right tonnage) on the Eckford plan of build ... would be only that of about 200 fathoms of inch wire cable chain.'

In Fanning's *Voyages Around the World, etc.* (1838) we find: '... during the year 1811, Henry Eckford built for the author two ships, about 330 tons each.' Are these ships *Volunteer* and *Hope*? President Madison's letter of recommendation for 'Edmund Fanning, Master of the Volunteer,' is dated 17 March 1812. There is also a letter signed by Colonel Barclay, 'His Brittanic Majesty's Consul at the City of New York,' mentioning the ships *Volunteer* and *Hope*, and addressed 'to the Admirals, Captains and Commanders of His Majesty's Fleets, Squadrons, Ships of War, etc.' It is dated 12 May 1812.

This letter proved very useful when,

[1] Edmund Fanning, b. Stonington, Conn., 1769, d. New York, 1841.

[2] Henry Eckford, b. Irvine, Scotland, 1775, d. Constantinople, Turkey, 1832.

only on 5 June 1815, Fanning sailed from New York after the 1812 War—in *Volunteer*.

The names of these two ships fit rather nicely into the list given for Eckford, in J. H. Morison's *History of the New York Shipyards*. They follow *Eliza Gracie* (with Beebe) in 1809, and *Henless* 'on his own' in the same year. In 1810 there is *Hannibal* (522 tons). There is then a long gap; obviously caused by war, and government work. The list begins again only in 1818—a small ship, *Hector*, and the gigantic *Regulus*, 877 tons—28 guns—entirely of live oak.

When Edmund Fanning died in 1841, it was said to be 'of a broken heart.' The advice his *Memorial* offered to our government for the Wilkes' 'National Expedition' was not accepted, and 'those heavily, clumsily built, old-fashioned brigs and schooners now attached' were used. Not 'two small vessels on the Eckford plan' (which) 'would have been Fulton-like, new and truly American.'

PHYLLIS DEKAY WHEELOCK

Voyages of *Star of Poland*

This list of voyages is a correction to those which I included in the history of the four-masted bark *Star of Poland* in The American Neptune, VIII, No. 4. After taking the time and opportunity to recopy and correct some data, which I copied from the Alaska Packers files, I was surprised to find that I had made an error in crediting *Poland* with an offshore voyage under charter in 1916. As this list of dates and voyages will show, she made the annual trip to Alaska in the spring and summer of 1916, and upon her return to San Francisco was then chartered for an offshore trip.

Further study revealed that the bark *Star of Holland*, another vessel in the Alaska Packers fleet, made a voyage under charter which is identical to that which I showed *Poland* to have made in 1915.

1915.	
1 February	On berth
3 February	Sailed San Francisco
9 February	Arrived Nanaimo, B. C.
17 February	Sailed Nanaimo, coal cargo
23 February	Arrived San Francisco
15 April	On berth
20 April	Sailed San Francisco
19 May	Arrived Loring Cannery, Alaska
30 September	Sailed Loring
10 October	Arrived San Francisco
1916.	
12 April	On berth, San Francisco
20 April	Sailed San Francisco
5 May	Arrived Loring Cannery, Alaska
6 September	Sailed Loring, in tow for San Francisco
14 September	Arrived San Francisco
26 September	Sailed San Francisco in tow, chartered to Balfour-Guthrie for lumber cargo to Australia
2 October	Arrived Tacoma
25 October	Sailed Tacoma
26 October	Arrived Everett, Washington
11 November	Sailed Port Townsend
1917.	
6 March	Arrived Port Pirie, Australia, 118 days. Chartered to Elder, Smith & Co., to load wheat in Port Pirie for Callao
12 May	Sailed Port Pirie
30 July	Arrived Callao, Peru, 79 days
19 September	Sailed Callao in ballast. Chartered to duPont for nitrate cargo to San Francisco
28 September	Arrived Calenta Buena, Chile
30 October	Sailed Calenta Buena, nitrate cargo
1918.	
3 January	Arrived San Francisco, 65 days. Chartered through Struthers & Dixon by U. S. Shipping Board for voyage with general cargo to Manila
8 March	Sailed San Francisco
——	Arrived Manila
August	Sailed Manila
15 September	Wrecked Katsuura Wan, Honshu, Japan

HAROLD D. HUYCKE

Privateer Sloop *Jefferson*

It is stated on page 236 of the October 1953 number of The American Neptune that the private armed sloop *Jefferson* 'took as prizes in her *only* cruise three schooners . . .' This statement no doubt is taken from Crowninshield's book on

Cleopatra's Barge,[1] but Crowninshield stated that he was taking his information from family papers and undoubtedly he made no search for further facts. In *A Check List of Salem Privateers in the War of 1812*[2] Belknap credits *Jefferson* with *three* cruises, viz: 1 July 1812, 4 May 1813, 15 Dec. 1813.[3] In addition to three captures he credits her with four assists on her first cruise lasting nine days.

The sloop *Jefferson* was the first privateer to sail from Salem in the War of 1812[4] and was followed the same afternoon by the schooner *Fame*.[5] The latter sent in the first and the former the second prize.

In the crew list of *Jefferson*[6] appears the name 'Nath. Weston, Sr., Seaman.' It should read 'Nath. Weston, Jr.,' as Nath., Sr., was fifty-three years of age and died the following December whereas Nath., Jr., was nineteen. I have examined the original and the writing is sufficiently illegible so that it could be read either way. To further confirm my statement I quote from a letter in my possession written by a young girl of seventeen, who was later to become my grandmother, to her chum who was my grandfather's sister. 'Salem July 2 - 1812 Dear Girl I now take this opportunity of informing you that I am in good health and hope these few lines will find you enjoyeing the same I received your letter dated the twenty six^h and was very glad to hear that you was contented I wish that I was with you for every thing looks so dull and gloomy I hear nothing but wars and rumors of wars your brother Nath[l] has gone out A Privateering he sailed on wensday afternoon but he dont expect to be gone more than fore weeks they have got a beautifull jolly crew there is thirty one young men all of Nats acquaintance I expect Charles will sail to morrow There was two went out yesterday and two a going out to morrow Nat has gone in the sloop Jefferson Georges boat ... At present I remane your effectinate Friend till Death C Waters'

LAWRENCE WATERS JENKINS

[1] Francis B. Crowninshield, *The Story of George Crowninshield's Yacht* Cleopatra's Barge *on a Voyage of Pleasure to the Western Islands and the Mediterranean, 1816-1817* (Boston: privately printed, 1913), p. 241.

[2] Henry Wyckoff Belknap, *A Check List of Salem Privateers in the War of 1812* (Salem: Essex Institute Historical Collections, 1943), LXXIX, 159.

[3] This date is evidently a typographical error for 1814. See *The Diary of William Bentley, D.D.* (Salem: Essex Institute, 1914), IV, 301.

[4] Ibid., p. 104.

[5] William Leavitt, *An Account of the Private Armed Vessels Belonging to Salem, Mass. During the War of 1812* (Salem: E. I. H. C., 1860), II, 60.

[6] Crowninshield, op. cit., p. 243.

More on *Sparrow-Hawk*

The reassembly of the seventeenth-century vessel *Sparrow-Hawk*, completed since the article on the subject in the January 1953 issue of The American Neptune, has revealed an interesting fact on a little-known aspect of that period ship construction—namely the method of planking.

As mentioned in the earlier article, the surviving planking of the old vessel shows that it was shaped by scorching the inside. When the fastenings finally weakened during the years spent under water on Cape Cod, it is natural that the planking should tend to lose its shape while the heavier, natural-shaped timbers held theirs to a remarkable degree. Since ill-fitting planking would obscure the lines of the old hull which the framing shows so clearly, the planks were not replaced in either the 1865 or the 1952 reassemblies.

It was found, however, that two small pieces of planking fitted fairly, one port and one starboard, on the stern knee and Y timbers forming the deadwood. These planks are admittedly not in their correct positions vertically. To correct this detail would necessitate a redesign of the supporting battens, which does not seem warranted since little, if anything, would

be added to the general picture. The important facts are that these planks are at an angle of about seven degrees to the keel, and that there joint lines are converging. This can mean but one thing—that the garboard strake of planking, and consequently the strakes above, followed the floor line, the space below being filled in with small fitted planks. This is a logical construction since it avoids a twist in the garboard of nearly ninety degrees. This would have been very difficult if not impossible with the two-inch by ten-inch oak planks that form the garboards of *Sparrow-Hawk*.

HOBART H. HOLLY

'This Day Comes in Fine' The Log of the Brig *Selma*

The brig *Selma* was built in Belfast, Maine, in the year 1855 for the coastwise and West Indies trade. In 1875 *Selma* was owned by Albert Cobb of Boston and her captain at that time was James E. Magan. From 1875 forward this ship and her crew began having a series of misfortunes.

The original manuscript log from which these many incidents were taken, was begun on 1 September 1875, when *Selma* was held in quarantine at Pensacola, Florida. At this time yellow fever was prevalent in the West Indies and Cuba and it is of historical interest that this dread disease entered the United States from these countries and spread throughout the Southern States, up the Mississippi River to Memphis, thence up the Ohio River to Cincinnati, reaching its peak in 1878. *Selma* was held in Pensacola from 1 September 1875 to 8 October of that year when she was released and sailed for Aspinwal (Panama) with a heavy load of lumber.

On the voyage she encountered heavy weather: '. . . the vessel making water freely and the Chronometer was in error, carried away the foretopmast back stay —pumps attended.'

29 October: 'This day comes in fine with a heavy swell causing the vessel to roll and strain badly.'

1 November: 'at 9 A.M. sighted the high land to the Westward of Aspinwal and stood in—at 6 P.M. let go the port anchor with 30 fathoms near the wharf. Hauled to the Wharf and made fast.'

Soon after the arrival of *Selma* at Aspinwal the first symptoms of her troubles began: 'this day comes in fine—at 6 A.M. turned to—the crew engaging in discharging cargo—one man on sick list. At 2 P.M. two more men on the sick list.'

In attempting to leave Aspinwal on 12 November *Selma* ran over a partially sunken wreck in the harbor and carried away her rudder. She returned to port, where the following day four of her crew deserted, taking with them one of the ship's boats. On the following day a second attempt was made to get under way with a replacement of the four deserters. Considerable trouble was experienced in steering, due to the poorly repaired rudder and, 'it was discovered that she will not make a course nearer than 8 points off the wind.'

22 November: 'this day comes in fine. at 7 P.M. carried away one shroud of the main rigging. So ends this day.' On the day following the second mate and the cook 'on the sick list.' The next day, one more of the crew and the captain, 'on the sick list.' On the 26th another member of the crew was 'taken down with fever.' On the following day, Thomas Lamond, a member of the crew, died, leaving only two men to work the vessel. 'It was decided to try and get to Corn Island for a harbor, discovered at daylight we were still abreast of the point after beating all night.'

28 November: 'One man and the Mate on deck.' 'Concluded to run into St. John,' 'at 4 P.M. let go the kedge anchor.' On the following day it was found that the vessel had drifted a considerable distance to the eastward. An attempt to signal passing vessels for assistance failed and while several vessels

were sighted none answered their signals of distress. Finally it was decided to try and backtrack to Aspinwal. The hawser was cut and the kedge was abandoned, as the men were too weak to haul the anchor aboard the ship.

During the following eight days only one man was able to be about. The captain 'down in bed with the fever but the Mate some better.' 12 December: 'comes in fine.' 'At 2 A.M. stood in for the island and with great effort two of the crew were able to get vessel into the harbor of Aspinwal and dropped anchor.'

The sick were taken ashore in the care of the United States Consul, and the steamers *California* and *Colon* came to the assistance of the stricken crew and their vessel. On Christmas Day all of the crew with the exception of one man were in the hospital with fever. On 26 December a board of survey came aboard and reported the vessel's condition to the Consul and on this day Captain Magan died.

'The day following the Mate went ashore to attend the funeral of Captain Magan and at this time was appointed Chief Mate.'

On 28 December *Selma* was hauled to the wharf, took in ballast and signed on a new crew.

The same day there was more trouble. Sail was made but 'the steering apparatus got smashed by a swell that was rolling in the harbor.' After repairs were instituted, *Selma* finally got under way. But adverse winds were encountered and she dropped anchor and waited some time before an obliging schooner took 'a line that was passed to her' and attempted to tow the ship out of the harbor. Again trouble struck. The line parted and the mate was badly injured. 'At 1 A.M. called all hands to get under way but the crew refused till there was another anchor on board. The Captain informed the crew that he would put back to port and obtain another anchor at the wharf but the men would not agree until they had seen the United States Consul ... The Captain went ashore and preferred against the Mate and several members of the crew and they were discharged.'

The second mate, John Baxter, was promoted to chief mate and John Hall was made second mate. On 31 December *Selma* finally made another attempt to get under way and left Aspinwal bound for Mantanzes, Cuba. All went well until the sixth day out when the mate, John Baxter, and one of the crew were taken sick and on the following day the crew member died 'of a fever and a diarrhea' and was buried at sea.

Selma passed through several very heavy squalls on 12 January and 'at eleven A.M. sighted breakers and the vessel had considerable trouble avoiding danger' due to the fact that they were unable to properly handle her because of a defective steering apparatus and fouling of the ship's bottom.

As the topmast and several of the sails had been damaged during the severe squalls that had been encountered the following day was spent repairing damages. 'Mr. Baxter still on the sick list.' The next day a very severe gale came up and 'all night the vessel going broadside to the wind.'

The next few days were fairly peaceful until *Selma* came in sight of Mantanzas when tragedy struck again; 'the Boy Charles fell from the foretop and injured himself quite badly in the back and foot and died the day following.' He was buried at sea. *Selma* finally anchored at Mantanzas and remained there until 16 February 1876 taking on a load of molasses. On her voyage back to the United States adversity still stalked her course for on the second of March 'at 2 P.M. wind increased to a gale, called all hands—at 3 At 3 P.M. blowing a strong gale, a sea hit the after house and stove the wheel and after cabin and filled it half full of water and washed the Captain down the companion way and broke his jaw in three places.' 'Hauled up the foresail and brought the ship to

the wind on the port tack.' *Selma*, without further disaster, finally was able to steer a safe course to Pensacola.

'So end this day.'

E. LEE DORSETT, M.D.

Sir Isaac Newton on Saumarez Patent Log

Sir Isaac Newton did not invent gravity, but at least he codified it and in doing so he attained the height of fame and the Presidency of the Royal Society, the highest honor in British scientific circles. Whenever he spoke he commanded respectful attention, and every word was oracular.

Therefore it was natural and proper that the Lords Commissioners of the Admiralty should refer to him for advice on any invention, scientific or mathematical, which was presented to them for the use of the Royal Navy.

A certain citizen of Guernsey, by name Henry de Saumarez had devised a little gadget which revolved when it was towed behind a ship or was attached to the keel, and the revolutions were counted on a little dial which could be hauled aboard and read every day or even every watch; and as a further refinement it could be made to ring a little bell every mile or every league. This was decidedly newfangled, possibly meritorious, though not in the accustomed traditions of the said Royal Navy; when it was submitted to the Lords Commissioners they sought advice. They got it, as follows:

An Account of the Proceedings of Henry de Saumarez of the Island of Guernesey, Gent.:

Concerning his discovery of an invention by which the course of a Ship at Sea may be better ascertained than by the Logg-Line, Viz. By a Dial placed in some convenient Place of the Ship, with a little Bell striking from Time to Time the Geometrical Paces Miles and Leagues which the Ship hath run (London 1717).

According to the Order of the Lords Commissioners of the Admiralty, I have considered the inclosed Proposals of Mr. Henry de Saumarez, and discoursed with him upon the same, and am humbly of the opinion that by means of the Instrument he hath invented, a Reckoning of the distance Sailed by a Ship may be kept with less trouble than by the Logg-Line, but I am not yet satisfied that the Reckoning will be so exact ... The instrument now proposed will keep a Reckoning of the Motion of the Ship with respect to the upper part of the Sea Water, but not of the driving of the Ship by Currents and Tides, and by the Motion of the upper Surface of the Sea caused by Winds, and how far it will keep a true Reckoning of the Motion of a Ship side Ways, occasioned by side Wind, doth not appear to me, and therefore the Logg-Line is not to be laid aside ... the Logg-Line alone should be depended upon, until it appears by Experience how far this New Instrument may be trusted. I have no Experience in Sea Affairs, nor ever was at Sea, and therefore my Opinion is not to be much Relied on.

(Signed) Is. Newton

HERBERT R. SPENCER

Documents

First Successful Marine Railway

Like all men of great wealth, Stephen Girard, the Philadelphia merchant and banker, was continually besieged by promoters. Occasionally a scheme had merit. One of these is described in the following letter to Girard. Seemingly the description is of the first successful marine railway of the type we know today. The writer seems to have had a number of interests in shipping and was the author of two rather rare marine books: *Observations on Thomas Naval Architecture* (New York, 1825); *A Commentary on the New System of Naval Architecture of William Annesley* (Troy, New York, 1823). The original letter is in the library of Girard College, Philadelphia.

New York October 19th 1826

Stephen Girard, Esq.

Sir

Near this city, on the shore of East river, Thomas Marine Railway—or— *Moving Dock*, has now been in Complete and satisfactory operation since the first of last March. Ships are almost every day hauled up and sent down. Between the 2d and 9th of the present month there were five large Ships successively careened. Their Masts & Yards all up—And one of them had Seventy five tons of ballast in. Almost all the Steam Boats have been careened upon it this summer—It is profitable I think the present Dock cost 35,000 Dollars—built in the winter months, including Diving Bell & Pile Driver. At the rate it has been earning, it must give the interest of 100,000 Dollars.

The foundation is piling—The frame bearing the Iron Rail way lays on them. The extent five hundred feet. The Carriage goes down under the Ship. She Grounds on the Centre & is *shored* from its side-cills and *cradled* by ranges of bilge levers, hinged to the centre & propt from the sides. Thus secured she is haulled up in 90 minutes by 1, 2, 3, or 4 Horses according to her Size—A chain leading from a Compound Windlass to the head & sides of the Carriage: And the other end passing round a Shiver to the Outer part of the carriage by a reversed movement of the horses and windlass hauls the carriage out under the Ship.

The Secretary of the Navy has ordered a Model made—which on its way through Philadelphia a week or two hence, may be shown to you, by permission, at the Bank—

Being the owner of the patent I contemplate selling the right to an individual or Company for Philadelphia—to be incorporated—and will agree to construct the Dock Complete—I have requested Mr Jos Lea (who knows me personally) to hand you Sir this letter, And solicit your attention to the Subject.

I am very respectfully,
Your humble Servant,
Jno L Sullivan.

Contributed by M. V. Brewington

More Foreign Mud

There had long been a belief that American traders to China played no part in the opium trade until after the Sino-British War. The following paper seems to prove the falsity of the story. Just who Young Tom may have been is not certain other than that he was Chinese. William Jones, however, was a well-known figure in early Jeffersonian America: Philadelphia ship-owner and merchant, President of the Bank of the United States, and Secretary of the Navy under Madison at the end of the War of 1812, among other things. The witness to the contract, E. Carrington, was a United States consular official. The opium trade was illegal even at that time, and being without the well-organized smuggling facilities of his British rivals in trade, Jones required Young Tom to take delivery aboard ship and get the goods ashore with his own resources. That Jones got away with the deal is attested by an item in the *American Daily Advertiser* (Philadelphia), 7 April 1806: 'Arrived-Ship *Ploughboy*, Jones, Canton. China goods to Jones & Clark.' The original contract is in the William Jones Papers, Historical Society of Pennsylvania.

Canton 3d Septr 1805.

Sold to Young Tom
Twelve picul ninety four catty or thereabouts

of Turkey Opium at the rate of One thousand and fifty dollars pr picul to be delivered on shipboard.[1]

The Conditions of the Sale are as follows Young Tom is to pay into my hands one thousand dollars as earnest money which he is to forfeit in case he fails to comply with this contract—

The opium is to be delivered to him at three different times on board the Ship *Ploughboy* in the presence and with the approbation of the Mandarines whom he is to compensate and satisfy and previous to the delivery of each parcel he is to pay for the same at my Factory.

The Opium to be weighed by my Steelyards on board—the first parcel say four picul to be paid for in five days and the whole to be paid for and delivered in twenty five days from the date hereof.

Wm Jones
[Chinese character of Young Tom.]

Received of Young Tom One thousand dollars as earnest money for the faithful performance of the above contract on his part.

Wm Jones.
Canton 3d Septr 1805.

Witness
E. Carrington.

Contributed by M. V. Brewington

Horse Biscuits for the Royal Navy

At the turn of the nineteenth century Lord Keith was sent to succeed Earl St. Vincent as commander-in-chief, much to the mortification of the logical 'heir,' Lord Nelson. He was in Livorno (or Leghorn, as the English persist in calling it) for the ides of March 1800 and sent Captain Todd with *Queen Charlotte* to reconnoiter the island of Cabrera while he kept an eye on Napoleonic threats on the Italian mainland itself.

At six in the morning of 17 March, *Queen Charlotte*—then some four leagues from Livorno—caught fire under the half deck. Loose hay had become ignited from the match tub, which was kept on His Majesty's Ships even though gunlocks were in use, and soon spread to the decks. The flames climbed the mainmast and ignited the mainsail. Soon *Queen Charlotte* was ablaze from the mainmast aft.

[1] One picul = 100 catties = 133 1/3 pounds avoirdupois.

Lord Keith watched anxiously from the shore, sending all boats he could lay his hands on to the aid of the fiery ship but the heated cannon exploded and kept rescue craft at a distance. Of the 840 officers and men aboard, only 167 were saved and Captain Todd and Lieutenant Bainbridge died battling the fire.

William James observed that the 'accident was not very creditable to the discipline of the ship'[1] but Edward Brenton[2] insisted that 'every ship, however well regulated and conducted, is liable to these misfortunes; and, when it is recollected that a vessel of war is one mass of combustible materials, we are only astonished that they do not occur more frequently.'

Almost two decades later, the accidental burning of *Queen Charlotte* was brought to the attention of Sir Joseph Banks in an unusual communication addressed to him as President of the Royal Society.[3] The document is reproduced below in its entirety.

To the Right Honourable Sir Joseph Banks Bart. G.C.B. &c. &c. &c.

Chesterman Place
Reading
July 25th 1818

Sir

Since the Burning of His Majesty's Ship Queen Charlotte, occasioned by loose Hay, and it is remarkable that more Accidents of the Kind have not happened, from Hay being put on Board Ships in the Hurry of Receiving Stores and Provisions, and allowed to lay about the Decks for a considerable Time, till there is Room to perform the tedious Operation of Pressing it.

I have at different Times made Experiments in Order if possible to supersede the Use of it, so dangerous an Article on Board Ship.

And beg Leave to present for your Consideration, the following Method for subsisting Horses and other Quadrupeds on Board Ship, and to alleviate their Sufferings in long Voyages. I propose Biscuit for Horses, made of Portions of bean flour, and coarse ground Oats, with six Ounces of Sulphur incorporated with each Hun-

[1] William James, *Naval History of Great Britain* (London, 1822) III, 504.

[2] Edward Pelham Brenton, *The Naval History of Great Britain* (London, 1837), I, 509-510.

[3] The manuscript is to be found with the letters, memos and other personal papers of Sir Joseph Banks, now part of the Sutro Branch California State Library, San Francisco, California.

dred Weight of Meal, which I trust will effectually prevent the Breeding those Insects so destructive to Biscuit in hot Climates.

As Hay on Board Ship very soon becomes insipid, and in Gales, sodden with Salt Water, I beg leave to recommend as preferable (even if it [hay] could be preserved in its highest State of Perfection) *Radix Pastinacae latifolia*, cultivated and Harvested in the following Manner—

Vidilicet: instead of Sowing them in February and March, for this Purpose I propose to sow them from the latter End of June to the Middle of August; the latter End of May or Beginning of June following to dig them up, wash them, press the heads of the Roots flat, and dry them under Cover in the Shade; after being thoroughly dry, to steem them in the Fumes of Sulphur, and Cask them up for Sea Service in Casks which have been steemed also.

For Sheep, and Cows, I propose the *Radix Pastinacae Folies Faeniculi tenuissimis*, and *Radix Rapi*, to be cultivated and Harvested in the same Manner. For Mules employed on Surveys in hot Climates, I propose Cakes of the Extract of the *Pastinacae latifolia* to be dissolved in Water, as Affording a nutritious Beverage and in that Form being so portable, I consider it better adapted to that Service than the dried Roots. Although British Seamen might not concert [to] the Biscuit made with a Portion of five Ounces of Sulphur to each Hundred Weight—should I ever proceed to a hot Climate, or, on a Voyage of Discoveries, I shall take my own Bread, thus prepared, which I am in Hopes would preserve it in its pristine State.

I have the Honour to be with great Respect, Sir
Your most Obedient Hble. Servant
John Couch, Lt. R.N.

We have no idea what Sir Joseph thought of Lieutenant Couch's plan to make use of the root crops of the Pastinaca, or Peucedanum, family. Whether Banks was pro-parsnip or anti-parsnip is not revealed by the physical evidence; the letter bears only his notation of the date received and the date (presumably) read and/or answered: 'July 26-18
July 27-18'

Contributed by Richard H. Dillon

Contract for a Vessel Built in Kennebunk, 1773

The following agreement between Joseph Churchill and John Butland, Jr., Kennebunk, Maine, 1773, declared:[1]

that the sd John for the consideration hereafter menchand promiseth and agreas with sd Joseph to Buld and Cumpletly finish sd Hull or Bodde of halve Dak topsall scooner of a Bout one hundred and twenty tons or ther a Bout of sd fowloring Dimenstions, sifty sevinging futt Kiel, twenty four futt Beme and nine futt or ten futt Holl as said Joseph shall Derict and find all the wood meterials suteble for the same, Except such wood as the Block-maker shall stand in ned of and Deliver hir cumpletly finished below all forls or showls in Musum River by the fiveteenth day of August next insuing the sd scooner to be Bult with all Wite Oak above water and all good oak under water and to have two striks at the flour timber heads and one strik under the Wales of three inch Plank and all the out Bord Plank to be whit oak and not under two inches and a half thick, the seling plank to be of good oak, the Plank for the Dak to be of good whit pine of the lenth of the half Dak and two inches and a half thick, the Marss and Bowsplit to be good whit pine and of Deminshand as the sd Joseph shall derict, the spars of the best sprus, and the sd Joseph promiseth to pay the sd John two pounds thirteen shilings and four pence for each and every ton that sd scooner shall ton when bult, the pay to be in the fowloring maner, one fiveth part to be payd in cash, one quorter part in West indea goods, one quorter in provitions and the other part in English goods at as chepe a rate as the sd Joseph sales for cash pay, the Wes-india goods and provitions to be of the fowloring prises—New England Rum to be tow shilings pr galon Mol at one shiling and eaght pence per galon, Cottin wool at one shiling and eaght pence per lb Coffee at one shiling and four pence pr pound Choclat at one shiling and six pence pr pound Corn at four shilings per bushill, Pork at four pound ten shilings and eaght pence pr barrill Cod Fish at seveingten shilings per quentell and the other articles of the provitions and Westindea goods to be at the same advarnse the pay to be at or before the time of delivery of the sd scooner.

And to the true and faithfull performance of this Agremint and every part of the same the sd Partes bind and oblige themsilves the other to the other in the penel sum of four hundred pounds to be payd by the Parte faling to the Parte obsarveing the same. In witness wareof the sd Partes have hereunto Interchangable set there hands and seals this first day of November in the thirtenth year of his Majasties Raign annoque Domine 1773. Joseph Churchill L.S.

Witnessed by Jacob Curtis, Jr., and Andrew Burley.

N.B. It is furder agred that the sd John shall be suplied with things as goods and pervistions as he shal corl for them.

Contributed by Kenneth Roberts

[1] Daniel Remich, *History of Kennebunk*, pp. 168-169.

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BY ROBERT GREENHALGH ALBION

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JENRICH, C. H., The Blackbird, 5 pp. *Rudder*, March. General account of slaving, with reproduction of old pictures from Maritime Museum.

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PRICE, J. M., see Sect. III.

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V. *Fisheries and Whaling*

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BROMLEY, A. W., The Oyster and the Brothers Flower, 6 pp. *N. Y. State Conservationist*, Dec.-Jan. Success of family of Long Island oystermen in developing harvest of over 50,000 bushels of young seed oysters in Hudson River.

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TORODE, W. G., New Haven, the Come-Back Port, 5 pp. *Marine News,* April. Arrival of Isbrandtsen freighter on 17 March 1954 'was the first shipment to be brought directly to New Haven by a deep-sea freighter since the end of the clipper ship era.' See also *N. Y. Times,* 28 Feb., v, 10.

Tristan da Cunha, 3 pp. *Ill. London News,* 16 Jan. Pictures with comments.

U. S. CENSUS BUREAU, COMMERCE DEPT., *Schedule K Classification of Foreign Ports by Geographical Trade Area and Country,* prepared under the supervision of J. Edward Ely, Foreign Trade Division, 35 pp., processed. 95 cents. Washington, The Bureau.

U. S. CONGRESS, HOUSE COMMITTEE ON THE JUDICIARY, Subcommittee No. 3. *Hearing on New Jersey-New York Waterfront Commission Compact, July 22, 1953* . . . , 236 pp. Washington, The Committee. Discussion of crime conditions in the Port of New York.

Vocational Training of Dockworkers in the Port of Rotterdam, 8 pp. *International Labour Rev.,* Jan.

WILLIAMSON, GEOFFREY, *Changing Greenland,* 290 pp. $3.95. New York, Library Publishers. 'The changing economic and social pattern of Greenland and its new strategic significance.'

YOUNG, HAZEL, *Islands of New England,* 230 pp. $3.95. Boston, Little, Brown. Includes historical background.

IX. *Shipbuilding and Allied Topics*

'A. G. C.,' pseud., The Controversy on Ship Tonnage Measurement: Present System Detrimental to Port Authorities. *D&HA,* Jan. Analysis of the century of controversy over the Moorsom's tonnage rules, enacted in 1854 in Britain.

ATTWOOD, E. L., & PONCELLY, H. S., *Theoretical Naval Architecture,* rev. by A. J. Sims, 430 pp. $8.00. New York, Longmans. 'Many of the chapters have been rewritten and two new ones have been added—on the vibration of ships and on merchant ships.'

CRANDALL DRY DOCK ENGINEERS, Inc., *A Short History of Railway Dry Docks since their Inception in 1854, with the Methods of Tonnage and Blocking Determination,* 19 pp. Cambridge, 42, Mass., The Company, 1950. Deals with the more elaborate type of 'marine railways.' Pioneer dock built at East Boston in 1854 by William H. Crandall, first of five generations in the business. Includes 35 photographs and several diagrams.

——— *A Short History of Floating Dry Docks, with Methods of Determining Vessel Weights and Load Distribution on Keel Blocks,* 14 pp. Ibid., 1954. Includes six photographs and eight figures illustrating different types.

DERIDDER, E. J., Aluminum in Shipbuilding, 4 pp. *Marine News,* April. 'European shipbuilders began wide use of aluminum in the early 1930's but the upsurge in its use for marine purposes did not start in America until 1947.'

FOWDEN, W. M. M., et al., The Gas Turbine as a Prime Mover on U. S. Naval Ships, 16 pp., *JASNE,* Feb. Development since 1938.

GARDNER, JOHN, How to Build a Tabloid Lobster Boat, 2 pp. *MCF,* April. Begins a series of articles on the design and construction of small boats for outboard power '. . . specifically for use on salt water, either as lobster boats or for other forms of fishing which require a hull that will lug, show a fair turn of speed, and be dry and safe in rough weather.' To be continued.

HERRESHOFF, L. F., *Captain Nat Herreshoff: His Life and the Yachts he Designed,* 343 pp. $7.50. New York, Sheridan House, 1953.

HIRSCH, M. O., John Ericsson: His Influence in My Community and Beyond, 10 pp. *Swedish Pioneer Hist. Quar.,* Jan. 'My community' is New York City.

HOLLEY, H. H., & PENNYPACKER, J. A., Economic Aspects of American Merchant Ship Design. *The Log,* Dec. 1953 ff. Series of articles in which the authors 'look for economic justification for the additional cost of 1953 ships over and above 1938 practice.'

Jack Willis—Master Shipbuilder. *Baltimore*, Sept. 1953.

KERR, JOHN, Modern Shipbreakers at Work, 5 pp. *Marine News*, March. Same Clydeside yard as described by Oliver Kemble (XIV, 150).

LOVELL, H., The National Physical Laboratory, 5 pp. *Trident*, Feb. Principally an account of the Yarrow Ship Tank and other features of the Ship Division.

MAURER, MAURER, see Sect. XI.

NYE, W. L., Architecture of the Clipper Ship, 2 pp. *Nautical Research Jour.*, Jan.

RITCHIE, S. L., More Life in a Boatyard, 2 pp. *Trident*, March.

RUSSELL, E. C., Three Centuries of Naval Shipbuilding, 5 pp. *Can. Shipping*, March. Survey of Canadian experience since early French colonial days, including the lake squadrons in the Revolution and War of 1812.

SCHULLER, RONALD, Submarine in the Desert, 4 pp. *Colliers*, 5 Feb. Construction of experimental engine for atomic sub 'Nautilus' at Arco, Idaho.

Shipyards of France, *S&SR:* 1. Forges et Chantiers de la Gironde, 28 May 1953; 2. Chantiers Navals de Ciotat, 18 June 1953; 3. Chantiers et Atelier de St. Nazaire (Penhoet), 7 Jan. 1954.

SIMPSON, D. S., see Sect. V.

SMITH, H. G., Hand Sewing and Canvas Work, 4 pp. *Yachting*, Feb. Chapter from his new 'The Arts of the Sailor' (XIV, 67).

WEST, JOHN, Tests, Trials and Triumphs, 5 pp. *Trident*, March. Detailed account of ship's sea trials.

X. *Naval to 1939—North America*

ALBION, R. G., Distant Stations, 9 pp. *USNIP*, March. Account of the experience of the United States Navy from 1801 to the present Sixth and Seventh Fleets, with notice of Royal Navy practice with distant squadrons or fleets.

At the Turn of the Century, 16 pp. *USNIP*, April. Reproduction of 26 photographs from the Detroit Photographic Co. collection in the Prints & Photographs Division, Library of Congress. Pictures consist chiefly of USN enlisted groups, most of them well moustached, in various shipboard settings, from 1896 to 1900.

BUSCH, F. X., *Enemies of the State* (Notable American Trials), 299 pp. $3.75. Indianapolis, Bobbs-Merrill. Includes account of the Teapot Dome's naval oil reserve cases.

DATER, H. M., USNR, Aviation and Sea Power, 10 pp. *USNIP*, April. First comprehensive analysis of the development of naval aviation in the United States Navy and Royal Navy, stressing the fouled-up situation with the RAF in the latter, in contrast to the satisfactory American integration.

——— Needed—The History of American Aviation, 4 pp. *Military Affairs*, Winter. 'Mahan in essence set down the lessons of the age of sail for the use of the age of steam . . . the time is at hand to study the fifty years' experience with the reciprocating engine.' The author is Deputy Historian, Dept. of Defense, former head of Naval Aviation History Unit.

ELLIOTT, J. M., USN, Franklin Buchanan: The Academy's First Superintendent, 5 pp. *Shipmate* (Naval Academy Alumni), Oct. 1953.

(FREMANTLE, J. A. L.), *The Fremantle Diary: Being the Journal of Lieutenant Colonel James Arthur Lyon Fremantle, Coldstream Guards, on his Three Months in the Southern States*, ed. Walter Lord, 319 pp. $4.00. Boston, Little, Brown. Descriptions of Brownsville, Matamoros, Charleston and, more briefly, Mobile in 1863.

GARRISON, J. H., see Sect. III.

GILMER, W. W., USN, 110 Days at Sea from Honolulu to Puget Sound: Destination Samoa, 4 pp. *Shipmate*, Feb. Details of Pacific cruise in old USS 'Iroquois,' 1889-1890.

HANSON, J. M., *Bull Run Remembers* . . . , 194 pp. Paper, $1.90. Manassas, Va., National Capitol Publishers, 1953. Includes account of services of regular warships and converted steamers in the Potomac Flotilla, 1861-62.

(JACKSON, A. C.), *The Conquest of California*, 31 pp. Paper, privately printed. New York, 21, Edward Eberstadt & Sons, 888 Madison Ave. 'Alonzo C. Jackson's letter in detail of the capture of Monterey in 1842 and his letter on the final conquest of 1846.'

LAND, E. S., USN, Availability in Lieu of Ability, 2 pp. *Shipmate*, Sept. 1953. 'Many jobs in the Navy are filled on a basis of availability rather than ability.' Former Chief of Construction & Repair and head of the Maritime Commission cites a case in his own career in the Adriatic, 1918.

MADDEN, R. B., USN, The Bureau of Ships and its ED Officers, 34 pp. *JASNE*, Feb. One of the most comprehensive analyses of the Navy's administrative history, this traces the bureaus of Construction & Repair and (Steam) Engineering to their consolidation into the Bureau of Ships in 1940 and also the special 'EDO' line status for the former members of the Construction Corps.

MERRILL, J. M., Submarine Scare, 1918, 10 pp. *Military Affairs*, Winter. Effect of U-boat activity along the east coast.

MUNRO, D. J., RN, *Commodore John Paul Jones, U. S. Navy*, 108 pp. $3.00. New York, William-Frederick.

MURPHY, ROWLEY, RCNR, Resurrection at Penetanguishene, 6 pp. *Inland Sea*, Spring. Raising of hull of a British warship built on Lake Erie during the War of 1812. See also *Life*, 23 Nov. 1953 (XIV, 151).

New York Naval Shipyard: A Record of Progressive Achievement in Shipbuilding since 1801, 5 pp. *Bureau of Ships Journal*, April.

PETERSEN, W. J., Naval Namesakes of Iowa Cities, 32 pp. *Palimpsest*, Nov. 1953. Remarks on 'Dubuque' 1904-1945; 'Keokuk' 1914-1947; 'Burlington' 1944; 'Des Moines' I, 1904-1929; II, 1946.

PINE, JAMES, USCG, *The Salty Sea: Proud School of Courage and Adventure*, 24 pp. New York, etc., Newcomen Soc., 1952. Episodes of Coast Guard history.

POWELL, J. W., ex-USN, Opera Bouffe Warfare, 2 pp. *Shipmate*, Feb. Scouting expedition in launches from converted yacht 'Vixen' in Cabanas Bay near Santiago, 1898.

ROSE, F. P., The Confederate Ram 'Arkansas,' 7 pp. *Ark. Hist. Quar.*, Winter.

(SHIPPEN, EDWARD, USN), Reminiscences of Admiral Edward Shippen: Bordentown in the 1830's, 28 pp. *Pa. Mag. of Hist. & Biog.*, April. Description of New Jersey town on the Delaware, with comments on several naval characters, especially Capt. Edward R. McCall, 'one of the steadiest and hardest drinkers of a drinking day.'

STANDLEY, W. H., USN, J. O. Duty a Half-Century Ago, 3 pp. *Shipmate*, Jan. Reminiscences of service of future CNO on Pacific Station around 1897-1898.

WINDAS, J. M., The 'Chesapeake' and 'Shannon,' 1 p. *USNIP*, April. Emphasizes the expectional efficiency of the British frigate.

XI. *Naval to 1939—Other Regions*

ALBION, R. G., see Sect. X.

ANDERSON, R. C., The Rig of Early Medieval Warships, 2 pp. *Mariner's Mirror*, Feb.

BOWEN, F. C., Story of the Royal Yacht, 15 pp. *Sea Breezes*, March.

BOXER, C. R., M. H. Tromp, 1598-1653, 22 pp. *Mariner's Mirror*, Feb. See also Sect. IV.

CARPENTER-TURNER, W. J., The Building of the 'Gracedieu,' 'Valentine,' and 'Falconer' at Southampton, 1416-1420, 18 pp. *Mariner's Mirror*, Feb. Minute details of every stage of the construction, financing, and manning of the unsuccessful premature great ship and her two tenders.

COLLIS, M. S., see Sect. IV.

DATER, H. M., see Sect. X.

DILLON, Sir W. H., *A Narrative of My Professional Adventures (1790-1839)*, ed. M. A. Lewis; Vol. I, 1790-1802, 468 pp. 45*s.* to non-members. London, Navy Records Society. An Irish bastard with good 'influence,' who ultimately rose to vice-admiral. Starting his naval career at ten, he participated in the First of June and was first lieutenant of a frigate at 17. These memoirs are valuable for their point of view rather than for any new evidence introduced.

JOHNSON, F. A., *Defense by Committee: the Origins and Early Development of the British Committee of Imperial Defense, 1885-1916*, typescript Harvard Ph.D. thesis. Cambridge, 1952.

LLOYD, CHRISTOPHER, *The Nation and the Navy*, 300 pp. 18*s.* London, Cresset. $3.75. New York, Macmillan. Compact, comprehensive and readable account of the Royal Navy to 1922, including nearly all aspects.

MAURER, MAURER, Coppered Bottoms for the Royal Navy: A Factor in the Maritime War of 1778-1783, 5 pp. *Military Affairs*, No. 2, 1950.

POWELL, J. R., Penn's Expedition to Bonratty in 1646, 17 pp. *Mariner's Mirror*, Feb. Unsuccessful amphibious expedition to relieve a Parliament-held stronghold in Ireland.

SMELSER, M. T., *The Insular Campaign of 1759: Martinique and Guadeloupe*, typescript Harvard Ph.D. thesis, 1948.

SUBERCASEAUX, BENJAMIN, see Sect. II.

TUNIS, EDWARD, *Weapons: A Pictorial History*, 151 pp. $4.95. Cleveland, World Pub. Co. Occasional items of naval ordnance.

XII. *World War II*

BARKER, E. L., USNR, War Without Aircraft Carriers, 9 pp. *USNIP*, March. Neglect of the carrier by the German and Italian navies and its effect upon their wartime decisions.

BRYAN, JOSEPH, III, USNR, *Aircraft Carrier*, 205 pp. $3.00 (paper, 35 cents). New York, Ballantine Books. Journal of four months of wartime action in the Pacific on the carrier 'Yorktown,' by the joint author of the Halsey memoirs.

Capture in Prize—German Ships Uncompleted at time of May 8, 1945 Surrender, 4 pp. *Am. Jour. International Law*, Oct. 1953.

DAVIN, D. M., *Crete (Official History of New Zealand in the Second World War)*, 547 pp. 30s. Wellington, War History Branch; London, Cumberledge.

DODSON, KENNETH, *Away all Boats*, 508 pp. $3.95. Boston, Little, Brown. A fictionalized account of the men and battle action of an attack transport in the Pacific.

GILLESPIE, O. A., *The Pacific (Official History of New Zealand in the Second World War)*, 395 pp. 30s. Wellington, War History Branch; London, Cumberledge, 1953.

GRENFELL, RUSSELL, RN, Air Power at Sea: A Fiasco in Flexibility, 5 pp. *Atlantic*, Jan. Argument against Air Ministry's argument that 'air power was so flexible in operation that there was no need for specialization between those employed over the land and those employed over the sea.' Cites in detail the escape of the 'Scharnhorst' and 'Gneisenau' in 1942.

HASHIMOTO, MORATSURA, ex-IJN, *Sunk: The Story of the Japanese Submarine Fleet, 1942-1945*, tr. by E. H. M. Colgrave, RN. 218 pp. 15s. London, Cassell.

KINNEY, S. H., USN, Russia Decorated the Non-Combatants, 6 pp. *USNIP*, April. Soviet decree awarding 120 orders and 70 medals to officers and men of the USN, USNR, USCG and USCGR for service on the Murmansk Run.

L'HERMINIER, J., *Casabianca. The Secret Mission of a Famous Submarine*, tr. from the French by Edward Fitzgerald, 243 pp. 12s 6d. London, Miller. The French submarine slipped out of Toulon on 27 Nov. 1942 and joined Free French fleet in Algiers; served as contact vessel with the resistance forces in Corsica and with the landing of the first occupation troops there.

LODGE, O. R., USMC, *The Recapture of Guam*, 214 pp. $4.25. Washington, GPO, 1953. Twelfth in the series of operational monographs prepared by the Historical Branch, G-3 Division, Headquarters, Marine Corps.

MADDEN, R. B., USN, see Sect. X.

MARUYAMA, MICHERO, *Anxtaban*, 206 pp. $3.50. New York, Hermitage House. Experiences of the twenty Japanese men and one girl marooned on a little Pacific island for seven years after American planes sank the little vessels in which they were carrying supplies to Truk. The girl and the surviving men ultimately surrendered to the Americans when convinced that the war was over.

POPHAM, HUGH, An Error of Navigation, 5 pp. *Blackwoods*, April. HMS 'Indomitable,' the 'newest and finest aircraft carrier of the Fleet' ran on a Jamaican reef in October 1941; speculation upon the effect of this accident upon the loss of the 'Ark Royal,' 'Prince of Wales' and 'Repulse' during the next two months.

STANDLEY, W. H., USN, More About Pearl Harbor, as told to Rear Admiral Arthur Ageton, USN, 6 pp. *U. S. News & World Report*, 16 April. The former CNO, a member of the Roberts Board, in this chapter from his forthcoming memoirs, expresses some misgivings upon the official Pearl Harbor verdict. Other articles occasioned by the Theobald volume, cited below, include those by Gen. H. D. Russell, 3 pp., ibid., 7 May; Adm. F. E. Beatty, 4 pp., ibid., 21 May; and Louis Morton, 4 pp. *The Reporter*, 8 June.

STRATTON, R. O., USN, German Naval Support Techniques in World War II, 7 pp. *USNIP*, March. Mobile logistic support methods.

THEOBALD, R. A., USN, *The Final Secret of Pearl Harbor: the Washington Contribution to the Japanese Attack*, 202 pp. $3.50. New York: Deven-Adair. Reproduced in full, in advance of book publication, in the *U. S. News & World Report*, 2 April, 46 pp. Forewords by Rear Admiral H. E. Kimmel and Fleet Admiral W. F. Halsey. The voluminous evidence, already published, is marshalled to argue that the commanders at Pearl Harbor were deliberately kept in the dark concerning the Japanese developments, so that an 'incident' might bring the United States into the war.

WILKINSON, BURKE, USNR, Tirpitz Tale, 10 pp. *USNIP*, April. Attack on the German battleship by British midget submarines in a Norwegian fjord in Sept. 1943.

WOODWARD, DAVID, *The Tirpitz and the Battle for the North Atlantic*, 235 pp. $3.50. New York, Norton. Already noted (XIV, 77) in the British edition with its different subtitle.

XIII. *Postwar Naval*

After the Cease Fire, 4 pp. *Canadian Shipping*, March. Close of Canadian naval participation in the Korean fighting.

BALDWIN, H. W., The Men Who Run the Pentagon, 5 pp. *N. Y. Times Mag.*, 14 Feb.

——— Capital Debate Casts New Light on 'New Look.' *N. Y. Times*, 21 March, IV, 3. Analysis of new politico-military policies.

——— Military Morale Ebbs. Ibid., 4 April, I, 38.

CARNEY, R. B., USN, Atomic Victory Depends on the Navy, 3 pp. *Nation's Business*, Feb.

(DAVIS, G. H.), Increasing a Submarine's Underwater Speed ... The New High-Test Peroxide System, 2 pp. *Ill. London News*, 3 April. Diagrams and sketches with brief comments.

ELLER, E. M., USN, Troubled Waters East of Suez, 40 pp. *Nat. Geog.*, April. By Commander of U. S. Navy's Middle East Force, former Director of Public Information. 'Middle East to the United States Navy means the vast and vital area from the Suez Canal to Calcutta.'

HAYES, J. D., USN, Logistics of Necessity, 3 pp. *Ordnance*, Jan.-Feb. 'Transportation systems, not organization tables, are the keynotes.'

——— Military Command or Management? 3 pp. Ibid., March-April 1953. 'The complex units that comprise the military organization today can't be just "commanded." ' Capt. Hayes is chief of the Procurement Branch, Industrial College of the Armed Forces.

How Russians Use Ships to Snoop, 2 pp. *U. S. News & World Report*, 30 April. 'Seagoing spies from Russia are a new worry for Allied defense planners. Soviet ships, uninvited, turn up almost anywhere. They fish near Allied maneuvers, tie up for "repairs" at key western ports, make cargo stops where crews can survey U. S. arms in Europe.'

JACKSON, HARRY, USN, USS 'Albacore': The 'New Look' in Submarine Design, 2 pp. *Bureau of Ships Journal*, March. Smaller than the average submarine, with high underwater speed.

KITTREDGE, G. W., USN, The Impact of Nuclear Power on Submarines, 8 pp. *USNIP*, April.

KNOX, R. J., USN, The Twentieth Century Clermont, 6 pp. *JASNE*, Feb. 'In the past five years I have watched the men and machinery of the USS "Timmerman" (EDD 828) take shape. I have observed a true marvel of engineering.' Experimental vessel, embodying a large number of innovations. See also D. G. Phillips, USN, 'Report on the USS "Timmerman," ' 6 pp. *Marine News*, March.

A Man-Sized Job, 4 pp. *Canadian Shipping*, March. The Canadian Wrens.

MASON, L. M., USMC, SACLANT, 6 pp. *Marine Corps Gazette*, April. 'Supreme Allied Commander Atlantic,' established 30 Jan. 1952, with headquarters at Norfolk. Article shows his relationship to NATO.

MILLER, W. J., USN, Reenlistment: A Key Factor in a Strong Navy, 10 pp. *USNIP*, April.

The Navy's Mighty Voice, 4 pp. *Bureau of Ships Journal*, March. The 'most powerful transmitter in the world,' recently established at Jim Creek Valley in the Cascade Mountains. See also *Life* article, 'Navy Radio Circles Globe' (XIV, 155).

New No. 2 Man in Defense Gets Things Done Quietly, 2 pp. *U. S. News & World Report*, 19 March. Sketch of Robert B. Anderson, Secretary of the Navy, selected to succeed Roger M. Keyes as Deputy Secretary of Defense.

PHILLIPS, CABELL, The Super-Cabinet for Our Security, 5 pp. *N. Y. Times Mag.*, 4 April. Development and workings of the National Security Council.

POATS, R. M., *Decision in Korea: An Authentic History of the Korean War*, 340 pp. $4.75. New York, McBride.

RAW, S. M., RN, The Fleet Train, 20 pp. *United Empire*, Feb.

ROTH, I. D., Atoms and Sea Power. *Military Review*, Sept. 1953.

RYAN, CORNELIUS, These Fighters Take Off Straight Up, 6 pp. *Colliers*, 2 April. The 'Navy's newest planes can make any warship, any merchantman an aircraft carrier.'

SHERMAN, R. U., JR., *The Formulation of Military Requirements for Munitions and Raw Materials*, typescript Harvard Ph.D. thesis. Cambridge, 1953.

SMITH, BEVERLY, Secretary Wilson's Year of Trial, 9 pp. *Saturday Evening Post*, 1 May. Analysis of performance as Secretary of Defense. 'In recent months his prestige has been rising steadily again, with Congress, with the press, and with the military.'

STRATTON, S. S., USNR, Balance Sheet on Korea, 8 pp. *USNIP*, April.

THOMAS, R. C. W., *The War in Korea, 1950-1953. A Military Study of the War in Korea up to the Signing of the Cease Fire*, 119 pp. 10s 6d. Aldershot, Gale & Poden.

UHLIG, FRANK, JR., The Atlantic Ocean—Sea of Decision, 5 pp. *USNIP*, March.

U. S. BUREAU OF NAVAL PERSONNEL, CHAPLAINS DIVISION, *United States Navy Chaplains, 1946-52. Biographies and Service-Record Sketches of 1,830 Chaplains including corrections and amendments to 1,555 Sketches which appeared in United States Navy Chaplains, 1778-1945, and Sketches of 273 Chaplains who had Active Duty beginning after Jan. 1, 1946 (History of the Chaplains Corps, v. IV)*, NavPers-15861, 203 pp. Paper, $1.00. Washington, GPO for The Bureau.

U. S. BUREAU OF SUPPLIES & ACCOUNTS, NAVY DEPT., *The Navy Supply System* (NavS&A-256), rev. ed., 21 pp. Washington, The Bureau, 1953.

U. S. S. R.: Soviet Naval Potential, 2 pp. *USNIP*, April. Translation of article in *Revista Maritima*, Nov. 1953.

WADE, H. A. L. H., Two Destroyers, 12 pp. *United Service*, Feb. Action of International Court of Justice following damage to British destroyers by mines in Albanian waters near Corfu, assessing damages of £843,947 against Albania.

WILLIAMS, R. E., JR., USN, The Great Debate: 1954, 9 pp. *USNIP*, March. The Naval Institute 1954 Prize Essay, analyzing the factors involved in the policy discussions over the relative merits of conventional balanced forces or emphasis on strategic air.

XIV. *Marine Art, Ship Models, Collections, Exhibits*

BAKER, W. A., More on the Framing of Models, 2 pp. *Mariner's Mirror*, Feb.

(BRETT, GERARD), *The Discovery and Mapping of the Great Lakes, Sweet Water, 1522-1703. An Exhibition held at the Royal Ontario Museum, March 1954*, 11 pp. Toronto, The Museum.

COBB, DAVID, *Drawing and Painting Seascape. Shipping and Waterside Scenery*, 166 pp. 35s. London, Pitman.

DIXON, R. A., Chesapeake Maritime Relics Hobby of Warwick Resident, Norfolk *Virginian-Pilot*, 27 Dec. 1953, II, 5. Collection of Robert H. Burgess, of Chesapeake Bay maritime exhibits, including figureheads, nameboards, trailboards, and other carved work.

DODGE, E. S., The Museum Built by Navigators, 6 pp. *LCC*, Autumn-Winter 1953. Peabody Museum at Salem.

——— *Peabody Museum of Salem: Report of the Director, 1953*, 47 pp. Salem, The Museum. Devotes considerable space to the new 'Cleopatra's Barge' wing opened during the past year.

GARDNER, A. T., Cantonese Chinnery's Portraits of How-qua and other China Trade Paintings, 20 pp. *The Art Quarterly*, Winter 1953.

KNOX, D. W., USN, The Naval Historical Foundation, 2 pp. *LCC*, Autumn-Winter 1953. Includes account of the Truxtun-Decatur Museum.

MEMORIAL ART GALLERY OF THE UNIVERSITY OF ROCHESTER, *'The Erie Canal: Thruway of Yesterday.' An Exhibition Featuring the 130th Anniversary of the Opening of Rochester's First Aqueduct over the Genesee River, October, November, December, 1953*, 35 pp. Rochester, The Gallery, 1953.

ROGERS, ROY, Modelmaker's Thickness Planes, 3 pp. *Nautical Research Journal*, Jan. See also Thomas Hornby, 'Modelmaker's Sawing Fork,' 2 pp. Ibid.

RYDER, H. G., *Edward John Russell, Marine Artist*, 27 pp. St. John, N. B., The New Brunswick Museum. Detailed sketch of life of the artist, 1832-1906, with catalogue of his marine paintings by George MacBeath.

SHANK, MICHAEL, The Directory of Ship Model Plans; Part I, Merchant Craft, 1 p. *Nautical Research Journal*, Jan.

SMITH, R. C., Martime Artist Who Paints With His Hat On, Thomas Skinner Does Paintings by the Dozen. Norfolk *Virginian-Pilot*, 11 April, v, 2. Thomas C. Skinner, staff artist of The Mariners Museum, Newport News.

STACKPOLE, E. A., Figureheads at the Mystic Museum, 3 pp. *LCC*, Autumn-Winter 1953.